This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

18971
R31

600036296W

C.

18971 e 31

B.M. Cat. M. 17

CATALOGUE

OF

MONKEYS, LEMURS,

AND

FRUIT-EATING BATS

IN THE

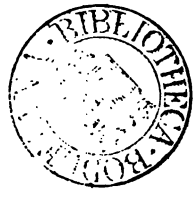
COLLECTION

OF THE

BRITISH MUSEUM.

BY

Dr. J. E. GRAY, F.R.S. &c.



LONDON:
PRINTED BY ORDER OF THE TRUSTEES.
1870.

PRINTED BY TAYLOR AND FRANCIS,
RED LION COURT, FLEET STREET.

PREFACE.

The object of the present Catalogue is to give a list of all the genera and species of the Monkeys, Lemurs, Colugoes, and Frugivorous Bats in the British-Museum Collection, with references to other species described from other collections. The letters B.M. after a specific name denote the species that are now contained in the Collection; and the absence of those letters indicates the species which are desiderata, and therefore desirable to be procured for the Collection.

The woodcuts are the same as were prepared to illustrate papers published in the 'Proceedings of the Zoological Society,' which are kindly lent by the Council of that Society for the purpose.

These sheets were printed in 1867, when the printing was interrupted by my ill health, and have been detained in the hope that I should be able to revise the remainder of the manuscript, which I still hope to print in a separate part at a future time.

JOHN EDWARD GRAY.

British Museum,
December 1, 1870.

TABLE OF CONTENTS.

	Page
Class 1. **MAMMALIA** ..	1
Subclass 1. **Unguiculata.**	1, 2
Order I. PRIMATES ..	1, 2
Suborder I. BIMANA	2, 3
Fam. I. HOMINIDÆ	2, 3
Gen. HOMO	3
sapiens	3
Suborder II. QUADRUMANA	2, 4
Fam. II. SIMIADÆ	2, 4
Section A. Anthropoid	4, 6
Tribe I. *Simiina*	4, 6
Gen. 1. MIMETES	4, 6
troglodytes. W. Africa ..	6, 127
Gen. 2. GORILLA	4, 7
Savagei. Gaboon	7, 127
Gen. 3. SIMIA	4, 8
satyrus. Sumatra	8
Tribe II. *Hylobatina*	4, 9
Gen. 4. SIAMANGA	4, 9
syndactyla. Sumatra	9
Gen. 5. HYLOBATES	4, 9
lar. Malacca &c.	10
pileatus. Siam	10
leucogenys	11
hoolock. India	11
Rafflesii. Sumatra	11
agilis. Sumatra	12
leuciscus. Java	12
Section B. Quadrupedal ..	4, 12
Tribe III. *Presbytina*	4, 12
Gen. 6. NASALIS	4, 12
larvatus. Borneo	13
Gen. 7. LASIOPYGA	5, 13
nemeus. Cochin China ..	13
Gen. 8. SEMNOPITHECUS ..	5, 13
leucoprymnus. Ceylon ..	14
cucullatus. India	14
obscurus. Malacca?	14
Johnii. India	14
entellus. Bombay	14
albipes. Madras	15
maurus. Java	15
cristatus. Sumatra	15
femoralis. Singapore ..	16
frontatus. Borneo	16
mitratus. Java	16
siamensis. Malay Islands	16
melalophus. Sumatra ..	16
nobilis. Sumatra	17
rubicundus. Borneo	17
Gen. 9. COLOBUS 5, 17,	127
satanas. Fernando Po ..	17
polycomus. Fernando Po and Sierra Leone	18
angolensis. Angola	18
bicolor. W. Africa	18
Kirkii. W. & E. Africa .	127
ferruginea. W. Africa ..	18
cristatus. W. Africa 19,	128
Gen. 10. GUEREZA	5, 19
Rüppellii. Abyssinia and W. Africa	19
Tribe IV. *Cercopithecina* ..	5, 19
Gen. 11. MIOPITHECUS ..	5, 19
talapoin. W. Africa	20
Gen. 12. CERCOPITHECUS	5, 20, 128
cephus. W. Africa	20
petaurista. Africa	20
melanogenys. W. Africa	21
Martinii. Fernando Po ..	21
nictitans. Fernando Po and Guinea	21
ludio. Africa	21
erythrotis. Fernando Po	21
Diana. W. Africa	22
leucocampyx. Africa ..	22
mona. Senegal	22
pogonias. W. Africa	23
Erxlebenii. W. Africa	23
erythrogaster. W. Africa	128
Pluto. Angola	23
Campbellii. W. Africa	24
albogularis. E. Africa ..	24
samango. S. Africa 24,	128
Gen. 13. CHLOROCEBUS ..	5, 24
ruber. W. & N. Africa	25
pygerythrus. S. Africa ..	25
rufo-viridis. Mossambique	25
sabæus. W. Africa	25
engythithea. Abyssinia .	26
cynosurus. W. Africa ..	26

	Page
Gen. 14. CERCOCEBUS	5, 26
æthiops. Africa	27
fuliginosus. W. Africa..	27
collaris. W. Africa	27
albigena. Africa 27,	128
Gen. 15. MACACUS	5, 28
sinicus. Madras	28
pileatus. India.....	29
nemestrinus. Sumatra..	29
melanotus. Madras	29
Pelops. N. India	30
problematicus. Assam..	128
cristatus	30
cynomolgus. India	30
assamensis. Siam.....	31
Rhesus. India	31
cyclopis. Formosa	128
Sancti-Johannis. Hong-Kong	129
speciosus. Japan	31
ochreatus	32
inornatus. Borneo	129
lasiotus. China.....	129
Gen. 16. SILENUS.....	5, 32
veter. India	32
Gen. 17. INUUS.....	5, 32
ecaudatus. N. Africa ..	32
Gen. 18. GELADA	5, 33
Rüppellii. Africa.....	33
Gen. 19. CYNOPITHECUS ..	5, 33
niger. Philippines	33
Tribe V. *Cynocephalina*....	5, 34
Gen. 20. HAMADRYAS	5, 34
ægyptiaca. N. Africa ..	34
Gen. 21. CYNOCEPHALUS..	5, 34
porcarius. S. Africa ..	34
anubis. Guinea.....	34
Thoth. Abyssinia.....	35
babouin. W. Africa....	35
sphinx. W. Africa	35
Gen. 22. CHÆROPITHECUS	5, 35
leucophæus. Africa....	35
Gen. 23. MORMON.....	5, 36
maimon. Africa	36
Fam. III. CEBIDÆ.....	2, 36
Section A. Gymnura.....	36, 38
Tribe I. *Mycetina*	36, 38
Gen. 1. MYCETES	36, 38
ursinus. Brazil.....	39
seniculus. Brazil	39
bicolor. Brazil.....	40
laniger. Columbia	40
palliatus. Caraccas	40
auratus. Brazil.....	40
caraya. Brazil	41
barbatus. Brazil	41
Beelzebul. Brazil.....	41
villosus. Brazil.....	41
Tribe II. *Lagotrichina*	36, 41
Gen. 2. ATELES 36,	41, 130
ater. Brazil	42
paniscus. Guiana, Peru.	42
fusciceps. S. America..	42
grisescens. S. America..	42
cucullatus. S. America..	42
marginatus. Brazil	43
hybridus. Nicaragua ..	43
melanochir. Caraccas ..	43
ornatus. S. America....	44
albifrons. S. America ..	44
Belzebuth. Brazil	44
vellerosus. Brazil.....	44
Bartlettii. E. Peru	130
Gen. 3. BRACHYTELES....	36, 45
arachnoides. Brazil....	45
Gen. 4. LAGOTHRIX	36, 45
Humboldtii. Columbia.	46
infumatus. Brazil.....	46
Section B. Trichiura.....	37, 46
Tribe III. *Cebina*	37, 46
Gen. 5. CEBUS.....37,	46, 130
leucogenys. Brazil	48
Apella. Brazil	48
pallidus. Bolivia	49
cirrifer. S. America....	49
vellerosus. Brazil.....	49
capucinus. Brazil.....	49
xanthocephalus. Paraguay	50
albifrons. S. America ..	50
hypoleucus. C. America	50
leucocephalus. Columbia	50
flavescens. Brazil.....	51
robustus. Brazil	51
annellatus. S. America..	51
chrysopus. Brazil ?....	51
subcristatus. S. America	52
capillatus. Brazil.....	52
Tribe IV. *Callitrichina*....	37, 52
Gen. 6. CHRYSOTHRIX....	52
sciureus. Brazil	53
ustus. Brazil	53
entomophagus. Bolivia.	53
Gen. 7. CALLITHRIX.....	37, 54
cuprea. Brazil	54
amictus. Guiana	54
torquatus. Brazil.....	55
donacophilus. Bolivia..	55
Moloch. Brazil	55
ornatus. New Granada	55
personatus. Brazil	56
nigrifrons. Brazil.....	56
castaneoventris. Brazil.	56

Page

melanochir. Brazil 57
gigo. Brazil 57
Tribe V. *Nyctipithecina*.... 37, 57
Gen. 8. NYCTIPITHECUS .. 37, 57
trivirgatus. Peru 58
Commersonii. Brazil .. 58
lemurinus. Columbia .. 58
Tribe VI. *Pithecina* 37, 58
Gen. 9. PITHECIA..... 37, 58
leucocephala. Brazil .. 59
monachus. Brazil 59
albicans. Brazil 59
rufiventer. Brazil..... 60
Tribe VII. *Brachyurina* .. 37, 60
Gen. 10. CHIROPOTES 37, 60
sagulata. Guiana..... 60
Satanas. Brazil 61
ater. Brazil? 61
albinasa. Brazil 61
Gen. 11. OUAKARIA..... 37, 61
melanocephala. Brazil.. 62
rubicunda. Brazil. 62
calva. Brazil..... 62
Tribe VIII. *Hapalina* 37, 62
Gen. 12. HAPALE 37, 62, 130
aurita. Brazil..... 63
Gen. 13. JACCHUS..... 37, 63
vulgaris. Brazil 63
Gen. 14. CEBUELLA..... 37, 64
pygmæa. Brazil 64
Gen. 14*a*. MICOELLA 130
sericeus. Brazil 131
chrysoleucos. Brazil .. 131
Gen. 15. MICO 37, 64
melanurus. Brazil 64
Gen. 16. LEONTOPITHECUS 37, 64
Rosalia. Brazil..... 65
chrysomelas. Brazil.... 65
Gen. 17. ŒDIPUS 37, 65
titi. Brazil 65
Geoffroyi. Panama 65
Gen. 18. MIDAS..... 38, 66, 130
mystax. Peru 66
labiatus. Brazil 66
rufiventer. Brazil..... 66
leucogenys. Brazil .. 67
flavifrons. Brazil 67
ursulus. Brazil..... 68
Gen. 19. SENIOCEBUS 38, 68
bicolor. Brazil 68
Fam. IV. LEMURIDÆ..2, 68, 131
Tribe I. *Lemurina*.....69, 70, 132
Gen. 1. VARECIA 69, 70
varia. Madagascar 70, 132
rubra. Madagascar 71
leucomystax. Madagascar 72, 132

Page

Gen. 2. LEMUR 69, 72
catta. Madagascar 72
Gen. 3. PROSIMIA.....69, 73, 132
albifrons. Madagascar.. 73
nigrifrons. Madagascar 73
melanocephala. Madagascar 73
mongoz. Madagascar .. 74
rufifrons. Madagascar.. 74
xanthomystax. Madagascar 74
coronata. Madagascar.. 75
albimana. Madagascar.. 75
anjuanensis. Madagascar 75
collaris. Madagascar .. 76
flavifrons. Madagascar.. 132
Gen. 4. HAPALEMUR ..69, 76, 133
griseus. Madagascar ..76, 133
Gen. 4 *a*. PROLEMUR 133
simus. Madagascar 133
Gen. 5. CHEIROGALEUS .. 69, 77
Milii. Madagascar 77
typicus. Madagascar ..78, 133
Gen. 5*a*. AZEMA 132
Smithii. Madagascar ..78, 134
Tribe II. *Galagonina*..... 69, 79
Gen. 6. OTOGALE 69, 79
Garnettii. Port Natal .. 79
crassicaudata. E. & W. Afr. 80
Monteiri. West Africa.. 80
pallida. Fernando Po .. 81
Gen. 7. GALAGO 69, 82
Allenii. West Africa .. 82
maholi. South Africa .. 83
senegalensis. W. Africa 84
sennariensis. Sennaar.. 84
Demidoffii. West Africa 86
Gen. 8. LEPILEMUR ..69, 86, 134
mustelinus. Madagascar 135
dorsalis. Madagascar .. 135
Gen. 8*a*. MURILEMUR 134
murinus. Madagascar ..87, 135
Gen. 8*b*. PHANER..... 135
furcifer. Madagascar ..88, 135
Gen. 8*c*. MIRZA 135
Coquerelii. Madagascar 136
Tribe III. *Microrhynchina*.. 69, 89
Gen. 9. MICRORHYNCHUS 69, 89, 136
laniger. Madagascar ..90, 136
Tribe IV. *Indrisina* 69, 90
Gen. 10. PROPITHECUS .. 69, 90
diadema. Madagascar.. 90
Verreauxii. Madagascar 136
Damonis. Madagascar .. 137
Gen. 11. INDRIS 69, 90
brevicaudatus. Madagascar 91
Tribe V. *Lorisina* 69, 92

	Page
Gen. 12. NYCTICEBUS	69, 92
tardigradus. Borneo ..	92
javanicus. Java.....	92
cinereus. Siam	137
Gen. 13. LORIS.....	69, 93
gracilis. India	93
Tribe VI. *Perodicticina*....	69, 93
Gen. 14. PERODICTICUS ..	69, 93
potto. West Africa	93
Gen. 15. ARCTOCEBUS....	69, 94
calabarensis. W. Africa	95
Fam. V. TARSIIDÆ	2, 96
Gen. 1. TARSIUS	96
spectrum. Borneo	96
Fam. VI. DAUBENTONIIDÆ	2, 96
Gen. 1. DAUBENTONIA....	96
madagascariensis. Madagascar.....97,	137
Suborder III. DERMOPTERA	3, 97
Fam. VII. GALEOPITHECIDÆ	3, 97
Gen. 1. GALEOPITHECUS	97
volans. Java	97
philippinensis. Philippines	98
Gen. 2. GALEOLEMUR....	97, 98
macrurus. Ceylon	98
Suborder IV. CHIROPTERA	3, 98
Fam. VIII. PTEROPIDÆ..	3, 98
Tribe I. *Pteropina*	99, 100
Gen. 1. SPECTRUM.....	99, 100
vulgare. I. Bourbon ..	100
rubricolle. Cape and Mauritius	101
dasymallum. Japan ..	101
anetianum. N. Hebrides	101
leucopterum. Philippines	102
Gen. 2. PTEROPUS	99, 102
conspicillatus. Eastern Australia	103
Edwardsii. Africa	103
medius. India.....	103
Kelaartii. Ceylon	104
funereus. Australia ..	104
poliocephalus. Australia	104
jubatus. Philippines ..	105
mysolensis. I. Mysol..	105
ornatus. New Caledonia	105
Floresii. Flores	106
loochoensis. Loochoo	106
argentatus. Amboyna?	106
caniceps. Batchian ..	107
nawaiensis. Fiji Is. ..	107
flavicollis. Fiji Is....	107
Geddiei. New Hebrides	107
affinis. Jilolo	108
tricolor. Ternate	108
Rayneri. Solomon Is.	108
Elseyi. N.E. Australia	108
vitiensis. Viti Islands	109
Livingstonii. Africa ..	109
ursinus. I. of Bonin ..	110
Macklotii. Timor	110
hypomelas. Aru Is. ..	110
griseus. Timor	110
chinensis. China	111
personatus. Ternate ..	111
Wallacei. Macassar ..	111
Gen. 3. EUNYCTERIS	99, 112
phaiops. Hatubello ..	113
Tribe II. *Macroglossina* ..	99, 113
Gen. 4. NOTOPTERIS	99, 114
Macdonaldii. Fiji	114
Gen. 5. MACROGLOSSUS..	99, 114
minimus. Java	115
Gen. 6. XANTHARPYIA ..	99, 115
seminuda. Ceylon	115
straminea. Africa	116
Gen. 7. ELEUTHERURA ..	99, 116
ægyptiaca. N. Africa..	117
unicolor. W. Africa ..	117
collaris. S. Africa	118
marginata. India	118
fuliginosa. Siam	118
infumata. Flores	118
fusca. India?.....	119
philippinensis. Philippines	119
Tribe III. *Cephalotina* ..	99, 119
Gen. 8. CEPHALOTES....	99, 119
Peronii. Timor	119
Tribe IV. *Harpyiana* 100,	120
Gen. 9. HARPYIA 100,	120
cephalotes. Georgia I.	121
albiventer. Morty I. ..	121
Tribe V. *Cynopterina* 100,	121
Gen. 10. CYNOPTERUS ..100,	121
marginatus. India	122
collaris. West Africa..	123
Gen. 11. MEGÆRA 100,	123
ecaudata. Sumatra....	124
Tribe VI. *Epomophorina* 100,	124
Gen. 12. HYPSIGNATHUS 100,	124
monstrosus. W. Africa	124
Gen. 13. EPOMOPHORUS 100,	125
macrocephalus. W. Africa	125
gambianus. Gambia ..	126
Gen. 14. EPOMOPS 100,	126
Franqueti. West Africa	126

CATALOGUE

OF

MAMMALIA.

Class 1. MAMMALIA.

Vertebrate animals, more or less covered with hair, and furnished with milk-giving mammary glands; respiring by lungs; having a heart with two ventricles and two auricles, circulating warm blood, enclosed in a thorax, separated from the abdominal viscera by a diaphragm; viviparous; the young nourished with milk.

Synopsis of Orders.

I. *Quadrupeds, or bipeds, with the fingers and toes elongate, flexible, and armed with claws or nails.* Unguiculata.

Order I. Primates. Teeth of three sorts. Thumb and great toe opposable to the fingers or toes. Teats pectoral. Penis free.

Order II. Feræ. Teeth of three sorts. Thumb not opposable. Teats ventral. Penis in a sheath.

Order III. Glires. Teeth of two sorts; cutting-teeth large; canines wanting. Penis in a sheath. Teats ventral.

II. *Quadrupeds, with the toes short, enclosed in the skin and armed with hoofs.* Ungulata.

Order IV. Bruta. Teeth all of one kind or entirely wanting. Hoof often compressed, elongate.

Order V. Pecora. Teeth of two or three kinds. Stomach complicated. Front of upper jaw toothless, callous. Toes in pairs. Hoofs triangular.

Order VI. Belluæ. Teeth of three kinds. Stomach simple. Upper cutting-teeth distinct. Skin thick, nearly naked. Hoofs triangular or nail-like.

III. *Limbs fin-like. Body elongate, fish-like, with an expanded horizontal tail. Nostrils valvular.*

Order VII. Sirenia. Nostrils normal, moderate, in front of the nose. Teeth of two or three kinds.

Order VIII. Cete. Nostrils large, subvertical, on the crown, far from the mouth. Teeth all similar or wanting.

Subclass I. UNGUICULATA. *Bipeds, or quadrumana, with the fingers and toes elongate, flexible, and armed with claws or nails.*

Order I. PRIMATES.

The front and often the hind limbs with a distinct thumb opposable to the fingers or toes. Teats two or four on the chest. Penis free, pendulous. Cutting-teeth $\frac{2}{2}$, $\frac{4}{4}$, or $\frac{4}{6}$. The fingers and toes are usually long and flexible, clawed.

Primates, *Linn.*

The Aye-Aye (*Daubentonia*) has only two kinds of teeth, similar in form to the *Glires*; but it has the other characters of *Primates*.

In some Monkeys of the Eastern and Western Hemispheres the thumb of the hand is small, or entirely wanting. In the Monkeys of the Western Hemisphere it is generally not opposable to the fingers; but their hands are so like the hands of other Monkeys that no one can mistake them for the fore feet of other Mammalia, and they have the rest of the characters of the *Primates*.

SYNOPSIS OF SUBORDERS AND FAMILIES.

Suborder I. BIMANA. *Hand only with an opposable thumb.*

Family 1. HOMINIDÆ. Cutting-teeth $\frac{4}{4}$, contiguous, opposed.

Suborder II. QUADRUMANA. *Hands and feet with an opposable thumb and great toe.*

* *Teeth of three kinds.*

Family 2. SIMIADÆ. Cutting-teeth $\frac{4}{4}$, contiguous, erect, opposed. Nostrils in front of nose, separated by a narrow septum. Claws all alike, of thumb broad. Grinders $\frac{5}{5} \cdot \frac{5}{5}$. Buttocks often callous. Eastern Hemisphere.

Family 3. CEBIDÆ. Cutting-teeth $\frac{4}{4}$, contiguous, opposed, erect or suberect. Nostrils on side of nose, separated by a very broad septum. Claws all alike, of thumb broad. Grinders $\frac{6}{6} \cdot \frac{6}{6}$, rarely $\frac{5}{5} \cdot \frac{5}{5}$. Buttocks hairy. Western Hemisphere.

Family 4. LEMURIDÆ. Cutting-teeth $\frac{2}{4}$ or $\frac{4}{6}$, dissimilar, upper small, separate in pairs, vertical; lower larger, contiguous, shelving. Claw of the second toe subulate; the others flat. Eastern Hemisphere.

Family 5. TARSIIDÆ. Cutting-teeth $\frac{2}{2}$, subsimilar, erect; upper large, conical, lower small, contiguous. Claws of the second and third toes subulate; the others flat. Asia.

** *Teeth of only two kinds. Canines none.*

Family 6. DAUBENTONIIDÆ. Cutting-teeth $\frac{2}{1}$, compressed, very large, with a space between them and the grinders. Claw of thumb flat, of fingers acute. Middle fingers elongate, slender.

Suborder III. DERMOPTERA. *Limbs enclosed in an expansion of the skin. Fingers and toes short, webbed, with opposable thumbs.*

Family 7. GALEOPITHECIDÆ.

Suborder IV. CHIROPTERA. *Limbs and the very greatly elongated fingers of the hand enclosed in a skin. Thumb and great toe free.*

Family 8. PTEROPIDÆ. The grinders bluntly tubercular, the cutting-teeth crowded between the canines. Nostrils pierced in the nose. Eastern Hemisphere.

Family 9. PHYLLOSTOMIDÆ. The grinders acutely tubercular. Nostrils pierced in a special disk ending behind in a more or less elevated leaf. Canines close; intermaxillary developed, narrow; the cutting-teeth crowded between the canines. Tail in interfemoral membrane. Western Hemisphere.

Family 10. RHINOLOPHIDÆ. The grinders acutely tubercular. Nostrils pierced in a special disk which is often complicated in front. Canines far apart; intermaxillary rudimentary or deficient; cutting-teeth small, deciduous. Eastern Hemisphere.

Family 11. NOCTILIONIDÆ. The grinders acutely tubercular. The nostrils simply pierced in the nose. Tail partly free, on upper surface or at the end of the truncated interfemoral membrane. Both Hemispheres.

Family 12. VESPERTILIONIDÆ. The grinders acutely tubercular. Nostrils simply pierced in the nose. Tail entirely enveloped and continued to the end of the conical interfemoral membrane. Both Hemispheres.

Suborder I. BIMANA.

Hand with an opposable thumb. The great toe on the same level as the other toes.

Bimana, *Cuvier.*

Fam. I. HOMINIDÆ.

The feet flat, formed for walking, the great toe in the same line with the rest; not opposable. Nose prominent on the nearly erect face. Chin prominent. Pelvis wide. Walking erect. Having the power of communicating his knowledge and ideas by speech.

HOMO.

Homo, *Linn.*

Homo sapiens. B. M.

Homo sapiens, *Linn.*

Hab. The Eastern and Western Hemispheres.

Suborder II. QUADRUMANA.

The hands and feet with an opposable thumb and great toe, which have broad flat nails. Fingers and toes similar.

Quadrumana, *Cuvier.*
Primates, *Dahlbom*, 1854.

Fam. II. SIMIADÆ.

Cutting-teeth $\frac{4}{4}$, contiguous, erect, opposed. Grinders $\frac{5}{5} \cdot \frac{5}{5}$; teeth 32. Nostrils in front of the nose, separated by a narrow septum. Claws all alike, of thumb flat, short. Buttocks callous, except in *Simiina*. Warm parts of Eastern Hemisphere.

The genus *Guereza* has the nostrils rather wide apart in front, as in some *Cebidæ*; but it has five grinders in each jaw, and the African habitat and habits of *Simiadæ*. *Nyctipithecus* (a genus of *Cebidæ*) has the nostrils placed much as in *Simiadæ*; but it has the number of teeth, the revolute tail, and the American habitat of *Cebidæ*.

Such exceptions to the characters of orders, families, and genera are constantly to be observed, showing that animals cannot be arranged by any single character, but by the result of a number of characters which, taken together, give the peculiarity of the group.

Synopsis of Tribes and Genera.

Section A. Anthropoid. *The arms much longer than the legs. Walking suberect. Tail none.*

Tribe I. Simiina. *Body stout. Toes and fingers short. Buttocks hairy.*

1. Mimetes. The arms reaching to the knees. Nails flat. Ears large. Africa.
2. Gorilla. The arms not reaching to the knees. Ears moderate. Africa.
3. Simia. The arms reaching to the ankles. Ears moderate. Asia.

Tribe II. Hylobatina. *Body and limbs slender. Hands and feet long, slender. Buttocks callous.* Asia.

4. Siamanga. Second and third toes united. Throat dilatile, of male bald. Face rather produced.
5. Hylobates. Second and third toes scarcely united. Throat hairy. Face nearly flat.

Section B. Quadrupedal. *The arms shorter than the legs, or rarely subequal. Walking on all fours. Tail distinct. Buttocks callous.*

Tribe III. Presbytina. *Head roundish. Nostrils on the sloping face. Hands and feet very long, slender. Thumb small or wanting. Stomach complicated.*

a. *Thumb short.* Asia.

6. Nasalis. Nose very prominent. Body stout.

7. Lasiopyga. Nose flattened. Body stout.
8. Semnopithecus. Nose flattened. Body slender.

b. *Thumb none or very rudimentary.* Africa.

9. Colobus. Back uniformly hairy. Nostrils close together.
10. Guereza. Back with a mantle of long hairs on each side. Nostrils rather wide apart.

Tribe IV. Cercopithecina. *Head round or oblong. Nostrils on the slope of the face. Hands and feet short. Thumb large. Stomach simple.*

* *Head rounded. Face short. Last lower grinder with three or four tubercles.* Africa.

11. Miopithecus. Face flat. Whiskers small. Last lower grinder with three tubercles. Africa.
12. Cercopithecus. Face short. Whiskers round. Last lower grinder with four tubercles. Africa.
13. Chlorocebus. Face rather produced. Whiskers rigid, reflexed. Last lower grinder with four tubercles. Africa.

** *Head oblong. Face more or less produced. Last lower grinder with five tubercles.*

14. Cercocebus. Body slender. Face black. Eyelids white. Tail elongate. Africa.
15. Macacus. Body stout. Face more elongate. Tail long or moderate. Asia.
16. Silenus. Body stout. Face elongated. Tail moderate, tufted at the end. Neck maned. Asia.
17. Inuus. Body stout. Face elongate. Tail none. Crown smooth. Africa, Europe.
18. Gelada. Body stout. Face much elongated. Tail moderate, tufted. Neck maned. Africa.
19. Cynopithecus. Body stout. Face much elongated, swollen on sides of nose. Tail none. Crown with a compressed crest. Asia.

Tribe V. Cynocephalina. *Head elongate. Nostrils at the end of the truncated nose. Hands and feet short. Thumb large. Stomach simple. Last molar with five tubercles.* Africa.

20. Hamadryas. Tail, end tufted. Neck maned.
21. Cynocephalus. Tail moderate. Neck not maned.
22. Chæropithecus. Tail very short, hairy all round. Face two-grooved, black.
23. Mormon. Tail very short, erect, bald beneath. Face grooved, bright-coloured.

Section A. ANTHROPOID. *The arms much longer than the legs. Walking suberect. Tail none.*

Tribe I. SIMIINA.

Body and limbs stout. Toes and fingers short. Buttocks hairy. Fur bristly. Bones of ilium rather concave. Chest and pelvis broad. The face-bones are greatly produced in length as the animal advances towards adult age. Lips dilatable, very mobile.

Simia anthropomorpha, *Dahlbom.*

1. MIMETES.

The arms reaching to the knees. Fingers and toes short, strong. Claws flat. Feet wide. Ears very large. Buttocks of young hairy, of adults rather bare and callous. Skull large; brain-case large. Face moderate. Africa.

Mimetes, *Leach, Journ. de Phys.* 1819; *Ann. Phil.* 1820, p. 104; not *Vigors.* Troglodytes, *Geoff.*; not *Swainson.* Anthropopithecus, *Blainv.* Le Chimpansé, *Cuvier.*

Mimetes troglodytes. *The Chimpanzee.* B. M.

Fur black, rather harsh. Face and hands nearly naked, wrinkled, blackish. Lips and chin with short, white, scattered hairs. Rump of young sometimes white.

Simia troglodytes, *Gmelin.* Jocko, *Buffon, H. N.* xi. t. 1. Pongo, *Buffon, Supp.* vii. Troglodytes niger, *Geoff.* T. leucoprymnus, *Less. Ill. Zool.* t. 12. Satyrus lagaros, *Meyen, Wiegm. Arch.* 1856, p. 282. T. calvus, *Du Chaillu*! * T. tschego, *Duvernoy, Arch. du Mus.* viii. v. t. 1, 3, 4, 6. Simia Pan, *Donovan, Nat. Repos.* t.

Hab. West Africa.

The male and female in the Zoological Gardens differed in the size of the head and colour of the face. Male head small, face blacker, more hairy. Female head and face larger, flesh-coloured. They may be from different localities.

Homo troglodytes, Linn., is from a fabulous account and figure.

a. *Troglodytes calvus*, Du Chaillu, Proc. Boston Soc. N. H. vii. p. 296, 1861! Trav. t. 32, 48, 63; P. Z. S. 1861, p. 273. B.M.

"Front of body with the blackest hair; neck, arms, and upper two-thirds of the back with long black hair; lower third of back and legs light-brownish grey; hands and feet black. Head bald to the level of the middle of the ears; behind scalp black, smooth, and shining; eyebrows thin, bristly, long, and black; face black; eyes somewhat sunken; nose flat; sides of the face hairy from the ears, the hair very short; scarcely bearded under the chin, mixed with a

* Where the mark of admiration is placed after a reference, it shows that the specimen described by that author is in the British Museum.

few grey hairs. Ears large, somewhat smaller than in the Chimpanzee, standing out laterally for the back."

Hab. Gaboon; called *Nschiego*.

The specimen received with the above name in the Museum was in too bad a state to determine with accuracy if it is distinct from *T. niger*. The baldness of the forehead appeared to be accidental.

Dr. Franquet (Arch. du Mus. x. 1862) described a black-faced Chimpanzee as the *T. tschego*; but M. du Chaillu thinks it "only an adult of *T. niger*, the face of that animal being flesh-coloured when young and black when adult."

b. *Troglodytes Kooloo Kamba*, Du Chaillu, Proc. Boston N. H. Soc. vii. p. 358, 1861! Trav. t. 39, 49, 50; Gray, P. Z. S. 1861, p. 273. B. M.

"It differs from *T. calvus* in wanting the baldness, the more rounded face, the whiskers round the face, and less prominent muzzle, the higher cheek-bones, and the more hollow cheeks. . . . .

"From the adult *T. niger* in a rounder face, more prominent cheek-bones, and more hollow cheeks; larger ears, less prominent muzzle, and the whiskers round the face. It has a different name given to it by the natives, who call it *Kooloo Kamba* or *Kooloo*.

"*Hab.* Ashankoo Mountains."

It appears to be probable that there are two species of *Troglodytes* from the Gaboon. Of the skulls in the British Museum received from M. du Chaillu, one, the common, will rest erect when placed on the lower jaw; the other is so much produced behind, or the line of the lower jaw is so oblique, that it always falls backwards when so placed; but I cannot find that the latter belongs to *T. Kooloo Kamba*.

c. *Troglodytes vellerosus*, Gray, P. Z. S. 1862, p. 181! B. M.

Fur very abundant, soft, black; of the back brown, with long brown tips to the blackish hairs.

Hab. Camaroon Mountains, *Burton*. A skin without skull, and bones of hands and feet.

2. GORILLA.

Arms elongate, not reaching to the knees. Foot short, broad; toes short, thick. Ears moderate. Throat rather naked, dilatile. *Hab.* Africa.

Gorilla, *I. Geoffroy*. Satyrus, sp., *Meyen*. Troglodytes, *Savage*.

Gorilla Savagei. *The Ingena*. B. M.

Male black; loins and hind legs and feet greyish white; crown dark red-brown. Female and young grey-brown; crown reddish.

Ingena, *Bowdich, Ashantee*, p. 441, 1819. Troglodytes gorilla, *Savage, Boston Journ. N. H.* 1847; *Blainv. Ostéog.* t. Troglodytes Savagei,

Owen, P. Z. S. 1848, p. 29, f. 12 ! *Trans. Zool. Soc.* iii. p. 381 ! Gorilla gina, *I. Geoff. Arch. du Mus.* viii. t. 2, 3, 4. Satyrus adrotes, *Meyen, Wiegm. Arch.* 1856, p. 182.

Hab. Gaboon, *Bowdich*, 1819.

3. SIMIA.

The arms reaching to the ankles; feet long, narrow; fingers and toes short; claws channelled; ears small; head moderate; cheeks and face elongate; throat dilatile. The cheeks of the adult male are much enlarged and very callous. The great toe not extending to the end of the metacarpal bone; often destitute of the claw-bearing joint. Buttocks hairy. Brain-case moderate. *Hab.* Asiatic islands.

Pongo, *Lacép.* 1798; *Kuhl.* Pithecus, *Geoff.* 1812; *Leach*, 1819; *Cuvier*, 1829. Satyrus, *Ogilby*, 1838; *Lesson.* Brachiopithecus, *Blainv.*

Simia satyrus. *The Orang-outang.* B. M.

Bright red-brown.

Jocko, *Buffon, Supp.* vii. p. 2. Simia satyrus, *Linn. S. N.* vol. i. p. 34, 1766; *Cuvier ; Geoffroy.* Simia agrias, *Schreb.* pl. 2. f. ii. B et ii. C, 1775. Simia rufus, *Lesson, Spec. Mamm.* p. 40. Pithecus satyrus, *Leach, Journ. Phys.* 1819; *Desm. Mamm.* p. 50. Satyrus knekias, *Meyen, Wiegm. Arch.* 1856, p. 281.

Hab. Sumatra.

See also

a. *Pithecus bicolor,* Is. Geoff. Ann. du Mus. xi. t., 1843. Red-brown; sides, armpits, inner part of the thighs, and round the mouth pale whitish-yellow; orbits subquadrangular. *Hab.* Sumatra. *Mus. Paris.*

b. *Grote Bornevosche—Ourang-outang* of Wurmb, *Pongo Papes Wurmbii*, Latreille; *Pongo de Borneo*, Blainv. = *Simia wurmbii*, Fischer. Fur brown; male with large tubercles on cheeks; from Borneo. Is perhaps only an adult.

c. *Orang* from Sumatra, Clark Abel, Asiatic Researches, xv. = *Pongo Abelii*, Less.; *Simia Abelii*, Fischer.

d. *Orang de Wallich—S. Wallichii*, Blainville, Journ. de Phys. 1818. From a large half-adult skull sent by Dr. Wallich to Paris, which, according to Is. Geoffroy, differs from that of *S. satyrus*, and is more like that of *S. Wurmbii.*

e. *Simia morio*, Owen, P. Z. S. 1836, p. 92; Trans. Zool. Soc. ii. p. 168. From a skull from Borneo with a peculiar dentition; perhaps an accidental variety. Dr. Cantor observes that the physiognomy and colour of the face exhibit a marked difference in living individuals from Sumatra and Borneo.—*Cat. Mamm. Malacca.*

f. *Simia giganteus*, Pearson, Journ. Asiat. Soc. Bengal, 1841, p. 660.

g. *Pithecus Owenii*, Blyth, Journ. Asiat. Soc. Beng. 1853, p. 369.

h. *Pithecus curtus*, Blyth, Journ. Asiat. Soc. Beng. 1856, xxiv. p. 518.

Tribe II. HYLOBATINA.

Body and limbs slender. Hands and feet long, slender. Buttocks callous. *Hab.* Asia and Asiatic islands.

4. SIAMANGA.

The arms very long, reaching to the feet; claws channelled; the second and third toes united as far as the joint between the second and third phalanges; the throat very dilatile, of male naked, of female covered with hair. Skull with an elongated, compressed face, the lower jaw nearly as wide behind as in front. *Hab.* Asiatic islands.

Siamanga, *Gray, List Mamm. B. M.* p. 2. Syndactylus, *Boitard.*

Siamanga syndactyla. *The Siamang.* B. M.

Black-woolly, chin and upper lip whitish.

Var. White.—*Raffles.*

Simia syndactyla, *Linn. Trans.* 1821! Pithecus syndactylus, *Desm.* Hylobates syndactylus, *Horsf.*! Siamanga syndactyla, *Gray, List Mamm. B. M.* p. 2!

Hab. Sumatra; Java.

5. HYLOBATES.

Arms reaching to the feet; claws channelled; second and third toes slightly united in the males, free in the females; throat hairy; head round. Skull with a short, less compressed face; the lower jaw much narrower at the end of the tooth-line than in front. *Hab.* Asia and Asiatic islands.

Gibbon, *Buffon*, 1766. Hylobates, *Illiger*, 1811. Brachiopithecus, partly, *Blainv.*

The specimens of the genus are very variable in colour, and hence they have been divided into several species, the species being often described from a single individual.

Some authors defend this practice by the fact that the natives of the country where they are found give them different names—that is, call a white specimen a White Unko, and a black one a Black Unko; but this appears to be only as we call horses white, bay, or brown, without regarding them as distinct species.

When several specimens are received from the same locality, as of *H. lar* from Malacca, or *H. pileatus* from Siam, the general colour of the animals varies from black to grey and to white. General Hardwicke figures the specimens found in the Himalaya as varying in the same manner.

Dr. Cantor and other naturalists who have had the opportunity of examining these animals alive state that there is a great variation

in the extent to which the toes of the hind feet are united, especially in the males of different specimens, and also sometimes they are united on one foot and free on the other of the same animal. M. Is. Geoffroy, placing faith in this character, separated a species, and formed for it a section of the genus, because in one male specimen he had observed the second and middle toe united by a membrane to the second articulation.

The species are very much alike in appearance, and are variable in colour from the same locality, so that one almost doubts their distinctness. Dr. Dahlbom has stated that there is a difference in the skeletons: thus he says that the bladebone of *H. Rafflesii* is smooth, without any tubercle; of *H. leuciscus*, with a single tubercle; of *H. lar* and *H. agilis*, with two tubercles, which are thin and distinct in the first, and thick and less distinct in the second. He also says that the arms of *H. Müllerii* are longer than those of *H. leuciscus*.

The species may be divided thus:—

1. Hands and feet white; nose rather elongate.
   a. Whiskers white. No. 1.
   b. Whiskers black. No. 2.
2. Hands and feet like the rest of the body.
   a. Whiskers rigid, white; frontal band none. No. 3.
   b. Whiskers soft, fluffy; frontal band white. Nos. 4, 5, 6, 7.

1. **Hylobates lar.** *The Gibbon.* B. M.

Black; circumference of the face, and the hands and feet, white; whiskers white.

Gibbon, *Buffon, H. N.* xiv. t. 2, 3. Homo lar, *Linn.* Simia lar, *Gmel.* Hylobates lar, *Illiger*; *Geoff.* Simia longimana, *Schreb.* t. 2, f. 1. Hylobates albimana, *Horsf. Zool. Journ.* 1820!

Var. Yellowish white.—*Cantor.*

Hylobates enteloides, *Is. Geoff. Voy. Jacq.* iv. p. 13, t. 184; *Arch. du Mus.* xi. t. 29.

Hab. Malacca; Siam; Burmah; Tenasserim, *Cantor.*

"Bladebones with two slender tubercles."—*Dahlbom.*

Dr. Cantor observes, on *H. lar*, that the index and middle toes of both or of one foot, in some individuals, of whatever sex or shade of colour, are united by a broad web the whole length of the first phalange, in some partially so, and in others not at all; and that in *H. agilis* the first phalange of the index and middle toe are in some individuals of either sex partially or entirely united by a web; sometimes the first phalange of the middle toe is partially united to the fourth (Cat. Mamm. Malay, p. 3). The ribs vary from 12 to 13 pairs.

2. **Hylobates pileatus.** *The Crowned Gibbon.* B. M.

Black; shoulders and loins greyish; hands, feet, and circumference of the face, and a ring round the crown, white; whiskers black.

Onko, *Tabraca, Hist. de Siam*, ii. p. 308, 1771. Hylobates pileatus, *Gray, Proc. Zool. Soc.* 1861, p. 136, t. 21 !

Var. 1. Black. B. M.

Var. 2. Dirty white ; crown, whiskers, and belly black. B. M.

Var. 3. White; crown-spot and belly black; whiskers white. B. M.

Var. 4. White, except the black bristles on the eyebrow. B. M.

Hab. Siam, *Mouhot.*

3. **Hylobates leucogenys.** *The White-cheeked Gibbon.* B. M.

Black ; throat and sides of cheeks with a broad white spot of spreading rigid hairs ; forehead black, without any frontal band.

Hylobates leucogenys, *Ogilby, Proc. Zool. Soc.* 1840, p. 20 ! *Martin, Monkeys*, p. 445, t. !

Hab. ———.

4. **Hylobates hoolock.** *The Indian Hylobates.*

Black ; frontal band grey ; whiskers soft and fluffy, black or greyish black. B. M.

Simia hoolock, *Harlan, Trans. Amer. Phil. Soc.* iv. p. 52, 1834 ; *Is. Geoff.* Hylobates hoolock, *Lesson* ; *Martin, Monkeys*, p. 438, f. 274, 275. Hylobates scyrites, *Ogilby* !

Var.? Fur brownish. B. M.

Hylobates fuscus, *Lewis, Boston Journal N. H.* i. p. 33.

Var. Fur pale yellowish-brown ; frontal band white ; whiskers bushy, darker brown.

Hylobates choromandus, *Ogilby, Proc. Zool. Soc.* 1837, p. 68 ! *Martin, Quad.* 442, f. !

Hab. India : Himalaya Mountains, *Hardwicke.*

5. **Hylobates Rafflesii.** *The Malay Gibbon.* B. M.

Black ; frontal band white ; whiskers soft and fluffy, full black.

Simia lar, *Raffles, Trans. Linn. Soc.* xiii. p. 242. Hylobates Rafflesii, *Geoff.* ; *F. Cuv. Mamm. Lith.* ; *Is. Geoff.* Hylobates agilis, var., *Martin, Quad.* p. 425, t. ! Hylobates concolor, *Harlan, Journ. Acad. N. S. Philad.* v. p. 229. Hylobates Harlani, *Lesson.*

Hab. Sumatra.

Var. Dark brown ; frontal band distinct.

Hylobates concolor, *S. Müller, Verhand.* t. ! (not *Harlan*). Hylobates Mülleri, *Martin, Monkeys*, i. p. 4 ; *Is. Geoff.*

Hab. Borneo.

Dr. Dahlbom describes the skeleton, which has the bladebone smooth, without any tubercles.

6. **Hylobates agilis.** *The Slender Gibbon.* B. M.

Fur testaceous brown; back paler; frontal streak and the soft fluffy whiskers pale brown.

Hylobates agilis (Wouwou), *F. Cuv. Mamm. Lith.* t.; *Raffles*! *Cantor*! H. variegatus, *Desm.*

Hab. Sumatra, *Raffles.*

Var. Fur brownish white. B. M.
Hab. Sumatra? Malacca, *Cantor.*

Dr. Dahlbom describes the skeleton of *H. agilis* (F. Cuv.), and states that it has two large, strong tubercles on the bladebone.

7. **Hylobates leuciscus.** *The Wou-wou.* B. M.

Ashy grey or bluish grey; crown of head with a large square black spot; frontal band and circumference of face paler; whiskers soft, full.

Wou-wou, *Camper*, not *F. Cuv.* Simia leuciscus, *Schreb.* Hylobates leuciscus, *Kuhl; Horsfield*! Simia Moloch, *Audeb.* § 2, t. 1.

Hab. Java; Sumatra.

See *Hylobates funereus*, Is. Geoff. Arch. du Mus. v. p. 532, t. 26.

Dr. Dahlbom describes the skeleton as having a bladebone with only one tubercle.

Fur of upper parts of body and outside of limbs ash-grey, of loins paler, and forehead blackish. *Hab.* Solo Islands.—*Mus. Paris.*

I am much inclined to believe that all these Malayan *Hylobatæ*, with perhaps the Indian one, are one species; but I have kept them distinct on account of the difference in the skeletons mentioned by Dr. Dahlbom.

Section B. QUADRUPEDAL. *The arms shorter than, or only as long as, the legs. Walking on all fours. Tail distinct, often elongate, but never prehensile. Buttocks callous.*

Tribe III. PRESBYTINA.

Head roundish. Nostrils on the sloping face. Hands and feet very long, slender. Thumb small or wanting. Tail very long. Stomach complicated of several pouches.

Simia semnopithecus, *Dahlbom.*

a. *Thumb short.* Asia.

6. NASALIS.

Nose very prominent, conical; the nostrils inferior. Body and limbs robust. Thumb short, perfect. Cheek-pouches none. Orbits of skull moderate or rather small. *Hab.* Asia.

Nasalis, *Geoff.* Rhynchopithecus, *Dahlbom, Zool. Stud.* p. 91, 1837.

Nasalis larvatus. B. M.

Ochre-yellow; head and upper part of the body chestnut; crupper, tail, forearms, and legs greyish-yellow; chin bearded; face, ears, and palms of a dusky leaden colour; tail shorter than the body and head.

Guenon à long nez, *Buffon, Supp.* vii. t. 11, 12. Simia nasalis, *Shaw.* Cercopithecus larvatus, *Wurmb.* Nasalis larvatus, *Geoff.*! Nasalis recurvus, *Vigors, Zool. Journ.* iv. (nose distorted, in spirits)! Rhynchopithecus larvatus, *Dahlbom*, p. 93.

Hab. Borneo.

The nose in Pennant's figure is artificially prolonged; and that of *N. recurvus* (Vigors), in spirits, was distorted by being pressed against the side of the bottle.

7. LASIOPYGA.

Nose moderate. Orbits large. Body robust. Limbs strong, of nearly equal length; the upper and lower arm-bones of nearly equal length; thumb perfect, short. "The spinous process of the seventh cervical vertebra as long as that of the first dorsal."—*Dahlbom.*

Lasiopyga, *Illiger*; Pygathrix, *Geoff.*; both from a defective skin with the callosities destroyed. Lasiopyga, *Dahlbom*, p. 83.

Lapsiopyga nemeus. *The Douc.* B. M.

Douc, *Buffon, H. N.* xix. p. 298, t. Simia nemeus, *Gmelin.* Semnopithecus nemeus, *F. Cuv. Mamm. Lith.* t. Lasiopyga nemeus, *Illiger.* Pygathrix nemeus, *Geoff.*

Hab. Cochin China.

8. SEMNOPITHECUS.

Nose moderate; nostrils lateral. Orbits large. Body slender; the arms much shorter than the legs; thumbs moderate, small, sometimes almost rudimentary; the forearm-bones short. "The spinous process of the seventh cervical vertebra half the length of the first dorsal."

Semnopithecus, *F. Cuv.* 1821. Presbytis, *Eschscholtz*, 1821.

1. Head with short reflexed hairs.
   a. Whiskers elongated, acute, expanded. 1.
   b. Whiskers short. 2, 3.
2. Head with short hair diverging from a central point. 4, 5, 6.
3. Head with a broad crest of erect hairs across the forehead. 7, 8, 9.
4. Head with a longitudinal, compressed crest of long hairs. 10, 11, 12, 13, 14.

* *The hairs on the crown of the head parted in front, lying down and directed backwards.*

1. Semnopithecus leucoprymnus. B. M.

Ashy brown; hands, feet, and outside of limbs darker; loins and rump white; whiskers elongate, expanding, grey; crown with reflexed hairs, parted in front. Adult—fur very soft, fluffy.

Buffon, Supp. vii. t. 21. Cercopithecus? leucoprymnus, *Otto, Nov. Acta Acad. Nat. Cur.* xii. p. 505. Semnopithecus leucoprymnus, *Desm.* S. Nestor, *Bennett, P. Z. S.* 1833, p. 67, B. M.! S. fulvogriseus, *Desmoul.* S. dentatus, *Shaw.* Cercopithecus latibarbatus, *Geoff.* S. porphyrops, *Link.* Presbytis cephalopterus, *Gray, List M. B. M.* 4! Cercopithecus cephalopterus, *Zimm.*

Hab. Ceylon, *Kelaart.*

2. Semnopithecus cucullatus.

Black-brown; chest, whiskers, and upper part of throat pale-brown; base of tail grey; head grizzled, with long reflexed hairs.

Semnopithecus cucullatus, *Is. Geoff. Zool. Bélanger*, t. i. (Malabar). S. hypoleucus, *Blyth, J. A. S. B.* xiii. t. 70. S. jubatus, *Wagner, Schreb. Supp.* i. 307.

Hab. India: Malabar.

3. Semnopithecus obscurus. B. M.

Ashy brown; underside of body and front of the thighs darker; hands black; forehead blackish; hair of the crown reflexed.

Semnopithecus obscurus, *Reid, P. Z. S.* 1837, p. 14! *Is. Geoff.* S. albocinereus, *Desm.* S. leucomystax, *Temm.* S. halonifer, *Cantor*! S. albocinereus, *Eydoux.*

Hab. Malacca?

** *Hairs on the crown of the head diverging from a central point and lying down.* Entellus.

4. Semnopithecus Johnii. B. M.

Ashy brown; underside of the body, sides, crown, and occiput testaceous; forearms and hands black.

Simia Johnii, *Fischer.* Semnopithecus Johnii, *Martin*! S. Dussumieri, *Is. Geoff. Arch. du Mus.* ii. t. 30.

Hab. India: Malabar.

5. Semnopithecus entellus. B. M.

Fur pale fulvous or grey, especially on the back and tail; hands and feet blackish. Hair of crown radiating from a central spot on the forehead, projecting. Face black.

Var. 1. Hands and feet black; head light greyish; fur rather rigid. B. M.

Simia entellus, *Dufresne*, 1797. Semnopithecus entellus, *F. Cuv. Mamm. Lith.*; *Sykes*!

Hab. Bombay, *Sykes.*

Var. 2. Hands and feet black; head and more or less of the upper part of the neck white; fur rather rigid. B. M.

Hab. Nepal, *Hodgson.*

Var. 3. Hands and feet whitish; head and body whitish; fur soft. B. M.

Hab. India.

6. Semnopithecus albipes.

Brownish grey; head fulvous; beneath whitish; tail brownish grey; eyebrows and hands dull fulvous grey; the fingers white; feet dull yellowish white.

Semnopithecus pallipes, *Elliot*; *Blyth, Ann. & Mag. N. H.* 1844, p. 312. S. albipes, *I. Geoff. Cat.* 14; *Arch. du Mus.* v. p. 576.

Hab. Southern India: Madras. Distinct from *S. entellus* of Bengal.

*** *Hairs on the crown of the head standing up, those of the front part bending forward.* Semnopithecus.

7. Semnopithecus maurus. *The Loutou.* B. M.

Deep uniform black; crest well marked; base of hairs yellow. Hairs on the crown standing up and bent forward in front. Young pale yellow; the hands first become blackish.

Guenon nègre, *Buffon, H. N. Supp.* vi. p. 83, t. Simia maura, *Schreb.* (not *Raffles*). Cercopithecus maurus, *Geoff.* Semnopithecus maurus, *F. Cuv. Mamm. Lith.* t. S. cristatus, *Dahlbom.*

Var. or *Female.* Golden or reddish-yellow.

Cercopithecus auratus, *Geoff.* Semnopithecus auratus, *Desmoul.*; *I. Geoff.* S. pyrrhus, *Horsf. Java*, t.

Hab. Java.

8. Semnopithecus cristatus. *The Chingkau.* B. M.

Fur black, grizzled or washed with greyish white. Hairs of the head standing up and bent forward in front. Young yellow.

Simia cristata, *Raffles, Linn. Trans.* xiii. p. 244! Semnopithecus cristatus, *Is. Geoff.* S. pruinosus, *Desm.* S. maurus, *Dahlbom*, not *I. Geoff.*

Var. Fur light-grey or whitish colour.—*Raffles, l. c.* p. 245.

Hab. Sumatra, *Raffles.*

Dr. Dahlbom, by mistake, describes this as all black, and *S. maurus* as white-grizzled.

9. Semnopithecus femoralis. *The Lotong.* B. M.

Hair of head short, erect, spreading. Fur greyish black, beneath grey; stripe down the chest and belly, and the inside of the thighs and lower part of the belly, white (female, B. M.).

? *Young.* White; middle of crown, nape, back, and upper surface of the tail black. B. M.

Lotong, Simia maura ? *Raffles, Linn. Trans.* xiii. p. 247. ! ? Semnopithecus chrysomelas, *Sol., Müller, Verhand.* p. 1011. S. femoralis, *Martin, Mag. N. H.* 1838, p. 436 !

Hab. Singapore, *Wallace*; Borneo, *Sol., Müller.* B. M.

******** *Hair of the crown long, forming a compressed longitudinal crest.*
Presbytis.

10. Semnopithecus frontatus. B. M.

Blackish; shoulders and back browner; spot on centre of forehead white; end of tail whitish; crest compressed.

Semnopithecus frontatus, *Sol., Müller, Verhand.* ! *Is. Geoff.; Martin, Mamm.* i. p. 475, f. 285 !

Hab. Borneo.

11. Semnopithecus mitratus. *The Soulili.* B. M.

Blackish ashy; head and crest, and upper surface of the tail, black; throat, chest, inside of limbs, belly, and underside of tail white; crest compressed.

Presbytis mitrata, *Eschscholtz, Reise,* p. 196, t. Semnopithecus comatus, *Desm.* S. mitratus, *Sol., Müller, Verh.* p. 160, t. 12* ! *Is. Geoff.*

Hab. Java.

"The hinder upper grinder without the fifth tubercle."—*Blainv.*

12. Semnopithecus siamensis. B. M.

Brownish ashy; chin, throat, underside of the body, inside of the legs, and back part of the thighs whitish; forehead browner; crest compressed, rather darker; hands, feet, and upper and lower surface of the tail black.

Semnopithecus cinereus, *Gray, List Mamm. B. M.* ! S. siamensis, *S. Müller & Schlegel.* S. nigrimanus, *Is. Geoff. Arch. du Mus.* ii. p. 62.

Hab. Malay Islands.

13. Semnopithecus melalophus. *The Simpae.* B. M.

Fur ferruginous; outside of limbs bright red; back of thighs fulvous; the compressed crest and two streaks on the head black.

Simia melalophus, *Raffles* ! Semnopithecus melalophus, *F. Cuv. Mamm. Lith.* t. S. flavimanus, *Is. Geoff.*; *Lesson, Cent. Zool.* t. 40.

Var. 1. Back and shoulders ferruginous, blackish-washed; front of forearms blackish; arms, legs, and haunches bright fulvous. B. M.

Var. 2. Back ferruginous, black-washed; front of the forearms, legs, and haunches bright fulvous. B. M.

Hab. Sumatra, *Raffles.*

14. Semnopithecus nobilis. B. M.

Bright reddish fulvous; crown with a compressed blackish crest and a dark streak on each side; limbs and tail rather brighter.

Presbytis nobilis, *Gray, Ann. & Mag. N. H.* x. p. 256, 1842 !

Hab. Sumatra.

May be only a very bright high-coloured variety of the former; but the shoulders are not grey.

15. Semnopithecus rubicundus. *The Kalasie.* B. M.

Dark red brown; limbs and end of tail darker; whiskers and upper part of throat pale red. Crest compressed.

Semnopithecus rubicundus, *Sal. Müller, Verh.* i. p. 61, t. 9, t. 11 ! *Is. Geoff.*

Hab. Borneo.

See a. *Semnopithecus olivaceus*, Wagn., Schreb. Supp. i. 309.

b. *S. latibarbatus*, Temm. Fulvous-brown or yellow. Crown, cheeks, and tip of the tail testaceous. Thumb of hand complete. *Hab.* ——— ? in Mus. Paris.

c. *S. Phayrei*, Blyth, J. A. S. B. xvi. p. 733, t. 26. Arracan.

d. *S. Barbei*, Blyth, J. A. S. B. xvi. p. 734. Arracan.

e. *S. albocinereus*, Cantor, J. A. S. B. xv. p. 174; xvi. p. 733. Malacca.

f. *S. pileatus*, Blyth, J. A. S. B. xii. p. 174; xiv. p. 735, t. 26. f. 2.

g. *S. Anchises*, Blyth, J. A. S. B. xiii. p. 704.

9. COLOBUS.

Body robust. Cheek-pouches none. Orbit rather small. Hand with four fingers. Thumb abortive. Stomach sacculated.—*Owen, P. Z. S.* 1841, p. 84. *Hab.* Africa.

Colobus, *Illiger*, 1811.

1. Crown crested; whiskers elongated, expanded. Species 1.

2. Crown of head and sides of the face and throat with elongated hairs forming a mane; tail-end slightly tufted. 2, 3.

3. Crown of head with reflexed hairs; hair of forehead, sides of face, and chin long, expanded. 4.

4. Crown of the head with reflexed hair, rather radiated in front of forehead; circumference of face and chin smooth. 5.

5. Crown of the head with short reflexed hair, with two whirls in front, and a low, narrow, central, erect, longitudinal crest. 6.

1. Colobus Satanas. *The Black Colobus.* B. M.

Black; hair long, coarse; of crown and sides of the face elongated,

crisp, forming a broad, high, spreading crest, with the tips curved forwards.

Colobus Satanas, *Waterhouse, P. Z. S.* 1838, p. 58 !

Hab. Fernando Po, *G. Knapp.*

2. **Colobus polycomus.** *The King Monkey.* B. M.

Black ; hair on sides of the body very long, abundant; of forehead, circumference of face, and mane whitish ; tail white.

King Monkey, *Penn. Quad.* p. 46. Simia polycomos, *Schreb.* Cebus polycomus, *Zimm.* Colobus polycomos, *Geoff.* S. comosa, *Shaw.* Cercopithecus comosus, *Latr.* Ateles comatus, *Geoff.* S. tetradactyla, *Link, Beitr.* i. p. 62.

Var. Tail all white ; mane greyish. B. M.

Colobus ursinus, *Ogilby, P. Z. S.* 1835, p. 98 !

Hab. Fernando Po, *G. Knapp* ; Sierra Leone, *Whitfield.*

3. **Colobus angolensis.** B. M.

Black ; hair of sides elongate ; the mane of long hairs on sides of throat, and the end of the tail, white.

Colobus angolensis, *Sclater, P. Z. S.* 1860, p. 245 !

Hab. Angola. A flat skin without head or feet.

It differs from *C. polycomus* in the chest and two thirds of the lower portion of the tail being black.

4. **Colobus bicolor.** B. M.

Black, shining ; hair long, silky, of forehead, circumference of the face, and chin elongate, white ; tail white ; haunches grey.

Semnopithecus bicolor, *Wesmael, Bull. Acad. Brux.* 1835. S. vellerosus, *Is. Geoff. Bélang. Voy.* p. 37, 1836. Colobus leucomeros, *Ogilby, P. Z. S.* 1837, p. 69 ! *Martin, Hist. Mamm.* p. 497 ! C. vellerosus, *Is. Geoff.*

Hab. West coast of Africa.

5. **Colobus ferruginea.** *The Bay Colobus.* B M.

Fur short, blackish grey ; sides of neck, cheek, throat, the fore and hind legs, and feet red bay; base of tail above and nape reddish.

Var. 1. Fur sooty grey, the red colour paler, duller.

Colobus Temminckii, *Kuhl*, 1820 ; *Desm. Mamm.* p. 53. Bay Monkey, *Pennant, Quad.* i. p. 218. C. ferruginea, *Lesson.* Simia ferruginea, *Shaw, Zool.* i. p. 59 ; *F. Cuv.* C. ferruginosus, *Geoff. Ann. du Mus.* xix. ; *Martin, Mamm.* i. p. 498 ! C. fuliginosus, *Ogilby, P. Z. S.* 1835, p. 97 !

Var. 2. *rufoniger.* The black and red more intense, and bright ; tail black, red near the base.

Colobus rufoniger, *Ogilby, MS.* ; *Martin, Quad.* i. p. 500 !

Var. 3. *Pennantii.* Like *var.* 2, but feet and tail blacker; no red on the nape.

Colobus Pennantii, *Waterhouse, P. Z. S.* 1838, p. 57 ! *Martin, Quad.* i. p. 501 !

Hab. West Africa: Gambia, *Rendall.*

These species were described from flat furriers' skins; but the large series of skins and more perfect specimens show that they are only varieties, in intensity of colour, of the same species—the Bay Monkey of Pennant. The thumb varies in development; sometimes it has a claw.

6. Colobus cristatus. B. M.

Fur short, yellow brown; front part of body, shoulders, and outside of the fore legs greyer; throat, chest, belly, inside of limbs and feet greyish white. Hair of crown short, reflexed, with two streaks in front, and with a narrow, erect, longitudinal crest behind.

Colobus cristatus, *Gray, Ann. & Mag. N. H.* 1866 !

Hab. West Africa.

See *Colobus verus*, Van Beneden, Bull. Acad. Brux. v. p. 311, 1838. Head, neck, back, and base of the tail olive-brown, hairs all finely ringed with black; nape, and above and below the callosities, dark brown; tail long, grey, darker at the tip. Body and limbs strong; index finger six or eight lines shorter than the middle one. *Hab.* Africa. Mus. Paris.

10. GUEREZA.

Nostrils rather wide apart. Back with a line of long pendulous hair, forming a kind of mantle. Thumb rudimentary. Tail-end tufted. *Hab.* Africa.

Guereza Rüppellii. *The Guereza.* B. M.

Black; end of tail, hair round the face, and of the mantle white.

Colobus guereza, *Rüppell, Fauna Abyss.* t. 1 !

Hab. Abyssinia, *Rüppell*; West Africa, *Thompson.*

Tribe IV. CERCOPITHECINA.

Head round or oblong. Nostrils on the slope of the face, separated by a narrow septum. Hands and feet short, broad. Thumb large. Stomach simple. *Hab.* Africa.

A. *Head rounded. Face short. Last lower grinder with three or four tubercles.*

11. MIOPITHECUS.

Head globular. Whiskers straight, rather rigid, bent downwards. Body and limbs slender. Hands long; fingers united at the base;

thumb large. Eyes and ears very large. Nose rather prominent. Septum thick. Nostrils oblong, open, rather lateral. Skull large, enlarged above the orbits; face very short; orbits large. *Hab.* Africa.

Miopithecus, *Is. Geoff. Arch. du Mus.* ii. p. 549, 1843; *Dahlbom*, p. 99.

Miopithecus talapoin. *The Talapoin.* B. M.

Fur above olive-green, beneath whitish; face black; upper lip yellow, with scattered black hairs; orbits orange; eyebrows whitish; whiskers short, pale golden yellow.

Talapoin, *Buffon*, *H. N.* xiv. t. 46; *Mamm. Lith.* t. Simia talapoin, *Schreb.* Cercopithecus talapoin, *Erxl.* Miopithecus talapoin, *Is. Geoff. Arch. du Mus.* ii. p. 549. C. melarhinus, *Schinz*, i. p. 47. M. capillatus, *I. Geoff.*

(Discoloured.) Cercopithecus pileatus, *Desm.* (*Mus. Paris*), not *Shaw.*

Hab. West Africa.

12. CERCOPITHECUS.

Head rounded. Face short; cheek-pouches large; whiskers rounded, soft. Hands short; thumb well developed. Fur black, more or less yellow-ringed. The last lower grinder with four tubercles. *Hab.* Africa.

Guenon, *Buffon.* Cercopithecus, part., *Erxl.*

a. Nose blue; whiskers yellow. Species 1.
b. Nose covered with white hairs. 2, 3, 4, 5, 6.
c. Nose and ears covered with red hairs. 7.
d. Nose coloured like the body.
* Haunches with a white streak. 8, 9.
** Haunches with a white spot. 10.
*** Haunches without streak or spot.
† Head with a black temple-streak. 11, 11*, 12.
†† Head without any black streak. 13, 14, 15.

1. **Cercopithecus cephus.** *The Moustache.* B. M.

Olive-green, yellow-dotted; throat and beneath grey; temples and face black; whiskers yellow; nose with a large triangular blue mark; hands and feet blackish.

Moustac, *Buffon*, *H. N.* xiv. t. 39; *F. Cuv. Mamm. Lith.* t. ? Simia cephus, *Linn.* Cercopithecus cephus, *Erxl.*

Adult. Front of crown reddish. B. M.

Hab. West Africa.

2. **Cercopithecus petaurista.** *The White-cheeked Hocheur.* B. M.

Fur olive-green, yellow-dotted; face black; nose-spot small, subtrigonal, white; cheeks, chin, and under parts of body, inside of legs, and underside of tail white.

Blanc-nez, *Buff. Supp.* vii. p. 67. Simia petaurista, *Schreb.* Cercopithecus petaurista, *Erxl.* Ascagne, *F. Cuv. Mamm. Lith.* t. S. Ascanius, *Latr.* Lesser White-nosed Monkey, *Bennett, Zool. Gard.* fig. !

Hab. Africa: Guinea.

3. **Cercopithecus melanogenys.** *The Black-cheeked Hocheur.* B.M.

Fur olive, minutely yellow-grizzled, greyish beneath; nose-spot cordate, white; forehead, cheeks, hands, and feet black; temples whitish.

Var. Tail more rufous. B. M.

Cercopithecus melanogenys, *Gray, Ann. & Mag. N. H.* 1845! *Proc. Zool. Soc.* 1849, p. 7, t. 9. f. 1!

Hab. West Africa.

4. **Cercopithecus Martinii.** *The Blackish Hocheur.* B. M.

Fur blackish, minutely white-dotted; nose-spot ovate, white, narrow above; chest grey; temple, crown, arms and legs, inside and out, and end of tail black.

Cercopithecus Martinii, *Waterhouse, P. Z. S.* 1838, p. 58! 1841, p. 71!

Hab. Fernando Po.

5. **Cercopithecus nictitans.** *The Hocheur.* B. M.

Fur black; back minutely yellow-grizzled; beneath black; nose-spot hairy, white.

Hocheur, *Audeb.*; *F. Cuv. Mamm. Lith.* t. Winking Monkey, *Pennant*; Guenon à nez blanc, *Buffon, H. N. Supp.* vii. t. 18; *F. Cuv. Mamm. Lith.* t. Simia nictitans, *Linn.* Cercopithecus nictitans, *Erxl.* Lasiopyga nictitans, *Illiger.*

Hab. Fernando Po; Guinea.

6. **Cercopithecus ludio.** *The White-chested Hocheur.* B. M.

Fur black, closely grey-grizzled; chin, chest, and inside of upper arms white; temple, nape, shoulders, and outer and inner side of limbs and end of tail black; nose-spot oblong, higher than broad, white.

Cercopithecus ludio, *Gray, Proc. Zool. Soc.* 1849, p. 8, t. 9. f. 2.

Hab. West Africa; Central Africa, *Balfour Baikie.*

7. **Cercopithecus erythrotis.** *The Red-eared Monkey.* B. M.

Fur black, very minutely grizzled with grey; chin, throat, and chest white; nose, ears, and all, except the middle, of the upper-

side of the tail red bay; face, temples, and limbs black; cheeks white.

Cercopithecus erythrotis, *Waterhouse, P. Z. S.* 1838, p. 59 !

Hab. Fernando Po.

8. **Cercopithecus Diana.** *The Diana.* B. M.

Chin with a narrow white beard; fur black, minutely white-grizzled; the broad dorsal streak and rump bay; frontal band, cheeks, chin, throat, chest, front of shoulders, inside and back of thighs, and streak across the haunches white; face, tail, and outside of hind legs and wrists black.

Simia Diana, *Linn.*; *Audeb.* t. 6. Cercopithecus Diana, *Erxl.* C. diadema, *Kuhl.*

Var. *ignita* (adult). Back edge and inner side of thighs bright red bay. B. M.

Hab. West Africa.

See *C. roloway*, Fischer, Syn. Mamm. p. 20. Above deep brown, nearly black; head, sides, thighs, and legs dull grey; frontal band and chin-beard white; throat, chest, belly, and inside of thighs yellowish white.

9. **Cercopithecus leucocampyx.** *The Diadem.* B. M.

Fur grey brown, minutely grey-grizzled; underside of body black; crown, outside of limbs, and all but base of tail black; front edge of thighs and band across haunches whitish.

Simia leucocampyx, *F. Cuv. Mamm. Lith.* t. Cercopithecus leucocampyx, *Martin.* C. diadematus, *Is. Geoff. Voy. Bélang.* C. dilophus, *Temm.* La Diana, *F. Cuv. Mamm. Lith.* t.

Hab. Africa: White Nile.

10. **Cercopithecus mona.** *The Mone.* B. M.

Fur blackish olive, minutely yellow-grizzled; tail and outside of limbs black; chest, belly, inside of limbs, and spot on rump whitish; streak from eyebrows to base of ears black.

Adult. Darker, and more brightly coloured; frontal band indistinct. B. M.

Mone, *Buffon, H. N.* xiv. p. 258, t. 36. *Supp.* vii. t. 19. Cercopithecus mona, *Erxl.* Simia mona, *Schreb.* S. monacha, *Schreb.*

Var. *Monella.* Smaller, paler; beneath whiter; frontal band distinct; no black streak from eyebrows to ears. B. M.

Hab. Senegal.

See *Cercopithecus Grayi*, Fraser, Catalogue Knowsley Collection, Aug. 1850. "Very closely allied to *C. mona*, and differs in

having a yellowish-white spot over each eye, and a black stripe on each side of the head from eye to ear. Up the centre of the forehead runs a darkish stripe, each hair being annulated with black and greenish-yellow. There are no white spots on the crupper. *Hab.* West Africa."

11. **Cercopithecus pogonias.** *The Bearded Monkey.* B. M.

Fur greyish brown, minutely grey-grizzled; streak from eye to ear, broad streak on back, hands and feet, and end of tail black; forehead, whiskers, small moustache, and underside of body and outside of limbs yellowish.

Var. With the broad dorsal streak only rather blackish. B. M.

Cercopithecus pogonias, *Bennett, P. Z. S.* 1833, p. 67! *Martin*, i. p. 543, f. 198!

Hab. West Africa: Fernando Po, *Thompson.*

11*. **Cercopithecus Erxlebenii.** B. M.

Fur olive-brown, minutely grizzled with yellow; chest and underpart of body, inside of limbs, and sides of the forehead yellow; limbs, a broad streak from the eye to the ear, and end of tail black; ears with a red or yellow pencil.

Var. *Erxlebenii.* Back rather blacker behind; underside of tail yellowish. B. M.

Cercopithecus Erxlebenii, *Dahlbom and Pucheran, Rev. et Magasin de Zoologie*, 1856, p. 96; 1857, p. 196; *Dahlbom, Zoologiska Studier*, p. 109, t. 5.

Var. *nigripes* (or adult). Back with a broad black streak; underside of tail reddish. B. M.

Cercopithecus nigripes, *Du Chaillu, Proc. Boston. N. H. Soc.* ii. 1860, p. 360!

Hab. West Africa: Fernando Po, *Thompson*; Gaboon, *Du Chaillu.*

12. **Cercopithecus Pluto.** *The Black-bellied Monkey.*

Fur black, very closely grey-grizzled; frontal band white; sides of forehead, shoulders, chest and limbs, and end of tail black; underside of body and inside of thighs reddish black.

Cercopithecus Pluto, *Gray, P. Z. S.* 1848, p. 56, t. 3!

Young. Back, head, and nape black, P. Z. S. 1848, t. 3! B. M.

Hab. Angola.

See *C. labiatus*, Is. Geoff. Arch. du Mus. ii., 1842; and var. from Port Natal, Is. Geoff. Cat. p. 20.

13. Cercopithecus Campbellii. B. M.

Blackish olive, yellow-washed; throat, thighs, belly, and inside of limbs whitish; forehead and crown yellow-varied; feet and outside of limbs and tail black.

Cercopithecus Campbellii, *Waterh. P. Z. S.*, 1838, p. 61! *Martin*, i. p. 544! C. Burnettii, *Gray, Ann. & Mag. N. H.* 1842, p. 256!

Var. or *adult.* Larger, sides of the forehead yellow. B. M.

Var. Tail greyish in the middle of its length.

Hab. West Africa: Sierra Leone; Fernando Po, *Thompson.*

14. Cercopithecus albogularis. B. M.

Fur olive black, yellow-washed and yellow-grizzled; throat, chest, and inside of thighs white; outside of limbs and end of tail blackish; tail like back at base, above and below.

Semnopithecus? albogularis, *Sykes, P. Z. S.* 1831, p. 105! Cercopithecus albogularis, *Owen, P. Z. S.* 1832, p. 18! C. monoides, *Is. Geoff. Arch. du Mus.* ii. p. 31.

Hab. East Africa.

Like *C. mona*, but of a different colour below, and without the white streaks on the sides.

15. Cercopithecus samango.

Fur black, grey-grizzled; throat, chest, and inside of the thighs yellowish white; outside of the limbs, and tip of the tail, blackish; base and underside of tail whitish.

Cercopithecus samango, *Sundevall, K. Vetensk. Akad. Förh.* 1844, p. 160; *Hornschuch, Arch. Skand. Beitr.* 1844, p. 179.

Hab. South Africa.

Very like *C. albogularis*, but grey, not washed with yellow, and tail white below.

See *C. lunulatus*, Temm. Esq. Zool. Guinea, p. 37.

13. CHLOROCEBUS.

Head oval. Face rather produced. Whiskers rigid, directed backwards. Fur grizzled; hairs annulated, greenish or reddish.

When alive the scrotum is green in *C. sabæus* and *C. pygerythrus*, blue in *C. cynosurus*; but these colours are not seen in the preserved skins; therefore the colour of the scrotum of some of the species described from stuffed skins is not known—as *C. Lalandii*, *C. Werneri*.

I. Face moderate, narrow in front, black. *Chlorocebus.*
   1. Fur red; frontal band black. Species 1.
   2. Fur greenish; frontal band none, or white.

a. Anal region ferruginous; frontal band yellow. 2, 3.
b. Anal region grey; frontal band narrow or indistinct. 4, 5.

II. Face large, broad in front, flesh-coloured; fur greenish; frontal band distinct. *Cynocebus.* 6.

* *Face moderate, narrow in front, black.* Chlorocebus.

1. **Chlorocebus ruber.** *The Patas.* B. M.

Fur red; nose, frontal band, shoulders, and outside of the arms blackish.

Patas à bandeau noir, *Buffon, H. N.* xiv. t. 25. Simia ruber, *Gmelin.* S. patas, *Schreber.* S. rufa, *Schreber.* Cercopithecus ruber, *Kuhl*; *Geoff.*; *F. Cuv. Mamm. Lith.* t.

Var. or younger. Shoulders and outside of arms red. B. M.

C. pyrrhonotus, *Ehrenb. Sym. Phys.* t.

Hab. West Africa: Senegal. North Africa.

The colour becomes brighter, and the shoulders and arms greyer, in adult age.

2. **Chlorocebus pygerythrus.** *The Black-chinned Vervet.* B. M.

Fur greyish green, minutely punctuated with black; face, hands, feet, and end of tail black; cheek, throat, and underside of body reddish white; front of legs like back; scrotum green; anal region and base of tail red.

Young. Hands and feet grey; *very young*, blackish. B. M.

Simia pygerythra, *F. Cuv. Mamm. Lith.* t. Cercopithecus pygerythrus, *Desm.* C. subviridis, *F. Cuv.* C. pygerythrus, *Geoff.*

Hab. South Africa: Cape of Good Hope, *Andrew Smith.*

See *C. Lalandii*, Is. Geoff. Arch. du Mus. ii. t. Grey; tail and sides olive. *Hab.* South Africa: Caffraria.

3. **Chlorocebus rufo-viridis.** B. M.

Fur yellow grey, minutely black-dotted; crown, tail, outside of limbs and thighs blacker; throat, underside of body, and inside of limbs white; anal region and base of tail red.

? Cercopithecus rufo-viridis, *Is. Geoff. Arch. du Mus.* ii. p. 564, t. 32, 1841. C. erythrarchus, *Peters, Monats. Preus. Akad. Berlin*, 1851, p. 756; Mossambique, t. 1.

Hab. Mossambique.

4. **Chlorocebus sabæus.** *The Callithrix.*

Fur black and yellow mixed; crown, hands, and upper part of base of tail blacker; frontal band none or very narrow; whiskers, throat, and underside and end of tail yellowish white; feet blackish; vent and base of tail grey; scrotum green.

Callithrix, *Buffon, H. N.* xiv. t. 37. Simia sabæus, *Linn.*; *Edw. Gleanings*, t. 215. Cercopithecus sabæus, *Erxl.* C. viridis, *Herm.* C. callitrichus, *I. Geoff. Cat.* p. 23.

Var. Frontal band very narrow, but well marked. B. M.

Hab. West Africa: Cape de Verd. Naturalized, St. Jago.

5. Chlorocebus engythithea. *The Grivet or Tota.* B. M.

Fur olive-green, dotted with yellow and black; broad frontal band, elongated spreading whiskers, the chin, and lower parts white; vent and base of tail grey; scrotum green.

Simia sabæus, *Linn.* Grivet, *F. Cuv. Mamm. Lith.* t. Cercopithecus sabæus, *Is. Geoff.* ? Simia engythithea, *Herm.* Cercopithecus engythithea, *Gray, List Mamm. B. M.* ! ? C. griseoviridis, *Desm.* ? C. cano-viridis, *Rüppell, Faun. Abyss.* t. ? C. subviridis, *F. Cuv. Mamm. Lith.* ? C. cinereo-viridis, *Temm. Mus. Leyd.* (B. M.). ? C. griseus, *Lesson.*

Hab. Abyssinia; Sennaar.

The older specimens are much darker than the young.

** *Face large, broad in front, flesh-coloured; fur greenish; frontal band distinct.* Cynocebus.

6. Chlorocebus cynosurus. *The Malbrouck.* B. M.

Fur yellowish, grizzled with black; frontal band, whiskers, throat, belly, inside of limbs, and underside of tail whitish; face pale; muzzle very thick and broad; lips whitish; scrotum dark blue; vent reddish.

Malbrouck, *Buffon, H. N.* xiv. p. 240, t. 29. Simia faunus, *Linn.* ? S. cynosurus, *Scopoli, Delic.* t. 19. Cercopithecus cynosurus, *Geoff.* C. tephrops, *Bennett, P. Z. S.* 1832, p. 109 !

Hab. West Africa.

See

a. *Cercopithecus ochraceus*, Peters, Monats. Akad. Berl. 1851, p. 756; Mossambique, t. 1 A.
b. *C. flavidus*, Peters, Monats. Akad. Berl. 1851, p. 757; Mossambique, t. 1 B.
c. *C. rufoniger*, Is. Geoff. Arch. du Mus. ii. p. 32.
d. *C. Werneri*, Is. Geoff. Arch. du Mus. v. t. 27.
e. *C. chrysurus*, Blyth, Ann. & Mag. N. H. 1845, p. 461.
f. *C. Tantalus*, Ogilby, P. Z. S. 1841, p. 33.

B. *Head oblong. Face more or less produced. Last lower grinder with five tubercles.*

14. CERCOCEBUS.

Whiskers small, indistinct. Eyebrows prominent. Eyelids white. The fifth grinder of upper jaw with five tubercles.

Cercocebus, *Geoff.* 1812; *Gray, List Mamm. B. M.* 1841. Æthiops, *Martin, Quad.* 1841.

I. Hair of crown directed backwards. *Cercocebus.*
  a. Blackish, with dorsal streak and crown-spot white. 1.
  b. Black, rather pale beneath. 2.
  c. Black crown; red collar; throat white. 3.

II. Hair of head elongated, forming a compressed crest behind. *Semnocebus.* 4.

* *Crown with reflexed hairs not forming a crest.* Cercocebus.

1. Cercocebus æthiops. *The White-crowned Mangabey.* B. M.

Blackish grey; narrow dorsal streak, crown, and feet blacker; spot on back of crown, throat, chest, and beneath and inside of limbs whitish.

Simia æthiops, *Linn.* Cercocebus æthiops, *Gray, List Mamm. B. M.* 7! *Is. Geoff.* C. Crossii, *Clark, MS.*

Hab. Africa.

2. Cercocebus fuliginosus. *The Sooty Mangabey.* B. M.

Fur sooty black; chin and beneath ashy; feet and tail blacker; hair of crown directed backwards.

Mangabey (sans collier), *Buffon, H. N.* xiv. t. 32. Simia æthiops, var., *Schreb.* S. fuliginosa, *F. Cuv.* Cercopithecus fuliginosus, *Kuhl*; *Geoff.* Cercocebus fuliginosus, *Gray, List Mamm. B. M.* p. 7.
ALBINO. Simia Atys, *Audeb.* iv. § 2. t. 8 (Mus. Paris). Cercopithecus Atys, *Desm.* Cercocebus Atys, *Geoff.*

Hab. West Africa. Mauritius, introduced and naturalized.

3. Cercocebus collaris. *The White-collared Mangabey.* B. M.

Blackish grey; cheeks, collar, throat, and chest white; crown bay.

Mangabey à collier blanc, *Buffon, H. N.* xiv. t. 33. ? Cercopithecus æthiops, *Kuhl.* ? Simia æthiops, *Linn.* Cercopithecus æthiopicus, *F. Cuv.* Pithecus æthiops, *Blainv. Ost.* t. 10. Cercocebus collaris, *Gray, List Mamm. B. M.* p. 7! *Is. Geoff.* C. mangabey, *Geoff.* White-eyelid Monkey, *Penn.*

Var. Tail-end white. B. M.

Hab. West Africa.

** *The crown with elongated hairs forming a compressed crest.* Semnocebus.

4. Cercocebus albigena.

Black; hair of crown elongated, forming a compressed nuchal crest; sides of throat greyish.

Semnopithecus? albigena, *Gray, P. Z. S.* 1850, p. 77, t. 16! Cercocebus albigena, *Pucheran, Rev. Zool.* 1857, p. 241.

Hab. Africa, *Du Chaillu.*

15. MACACUS.

Head rounded. Face elongate. Eyebrows prominent, becoming more so with age. Tail cylindrical, much longer than the body, pendent, or short, or very short. *Hab.* Asia.

Pithecus (Macaque), *Geoff. and Cuvier*, 1799. Macaca, *Lacép.* 1799. Macacus, *Desm.* Cynocephalus (Macaque), *Latreille.* Cynopithecus, *Blainv.* Pithex, *Hodgson.*

When young, docile and meek; when adult, malignant and ferocious. They breed early; period of gestation seven months; they are not completely adult for four or five years. The genitals of the females are much dilated and red during the rutting-season.

a. Forehead with diverging hairs divided by a central line; crown with a tuft of long radiating hairs; tail longer than the body. Species 1.

b. Forehead with short diverging hairs on the side; crown with long erect hairs, longer and radiating behind; tail longer than the body. 2.

c. Forehead with short reflexed hairs on the sides.

* Middle of forehead and crown with longer hairs, which form a radiating tuft behind; tail shorter than the body. 3.

** Middle of the forehead and crown with very long hair, forming a compressed crest behind; tail very short. 4.

d. Forehead and crown with short hair directed forwards, and with a tuft of short radiating hairs behind; tail not so long as the body. 5.

e. Forehead and crown with short reflexed hairs.

* Formed into a narrow, low, central, longitudinal crest. 6.

** Not forming any crest.

Tail long. 7, 8.

Tail short: 9, 10. Tail very short: 11.

1. Macacus sinicus. *The Manga or Bonnet Macaque.* B. M.

Forehead with short diverging hairs, divided by a central line; crown with a tuft of long radiating hairs; tail longer than the body; fur greenish brown, grizzled with yellow rings; throat, chest, underside of the body, and front of the thighs whitish.

Bonnet chinois, *Buffon, H. N.* xiv. t. 30. Simia sinica, *Linn.* Cynocephalus sinensis, *Latr.* Cercopithecus sinicus, *Desm.* (not *Geoff.*). Macacus radiatus, *Geoff.* (*Mus. Paris*).

Hab. Madras, *Elliot.*

Living in populous towns and the wildest jungle; carrying off fruit and grain from the shops of dealers.—*Elliot.*

2. **Macacus pileatus.** *The Zati or Capped Macaque.* B. M.

Forehead with short diverging hairs on the sides; crown with long erect hairs, with a tuft of long radiating hair behind; tail longer than the body. Fur reddish brown, outer part of thighs redder; throat and beneath greyish white.

Guenon couronnée, *Buff. Supp.* viii. t. 16. Simia pileata, *Shaw* (not *Desm.*); *Bennett, Tower Menag.* fig. ? Cercopithecus radiatus, *Kuhl.* ? Macacus radiatus, *Desm.* M. sinicus, *Geoffroy* (Mus. Paris).

Adult. Much darker; haunches, round base of tail, and tail blackish. B. M.

Var. Pale-grey; crown white; thighs reddish. B. M.

Hab. India; Ceylon.

3. **Macacus nemestrinus.** *The Bruh.* B. M.

Forehead with short hair on the sides, directed backwards; middle of forehead and crown with long hairs, forming a radiating tuft behind; tail shorter than the body, slender; fur dark brown or blackish, slightly yellow-washed; crown, nape, loins, and feet black.

Young. Pale brown; crown, nape, and whiskers blackish. B. M.

Pig-tailed Monkey, *Edw. Glean.* t. 214. Maimon, *Buffon, H. N.* xiv. t. 19. Simia nemestrina, *Linn.* Macacus nemestrinus, *Desm.* S. carpolegos, *Raffles*! S. cristata, *Fischer.* S. platipygos, *Schreb.* S. fusca, *Shaw.*

Junior ? Babouin à longues jambes, *Buffon, Supp.* vii. t. 8. S. longicruris, *Link.*

Hab. Sumatra; Borneo.

"The interdigital membrane between the first phalanges of the fore and middle finger and the index and middle toe occurs in this species."—*Cantor, Cat. Mamm. Malay*, p. 7.

4. **Macacus melanotus.** B. M.

Forehead with short hairs on the sides, directed backwards; middle of the forehead and crown with long hairs, forming a compressed crest behind; tail very short, rudimentary; fur black, obscurely and minutely punctuated with yellow; hairs dark, with a yellow ring; crown and crest blacker; throat, chest, and beneath paler.

Papio melanotus, *Ogilby, P. Z. S.* 1839, p. 31 !

Hab. Madras, *Ogilby.*

See *Macacus arctoides*, Is. Geoff. Voy. Bélanger, and Mag. Zool. iii. t. 11. Apparently without a crest, and with a very rudimentary tail. Cochin China.

5. Macacus Pelops. B. M.

Forehead and crown with short erect hair, directed forwards in front, with a tuft of short radiating hairs behind; fur pale reddish brown; side of neck paler; cheeks and underside of body yellowish grey; tail slender, not so long as the body.

Macacus (Pithex) Pelops, *Hodgson, Journ. Asiat. Soc. Calcutta*, xi. p. 1213 !

Hab. India: Nepal, Northern Hill, *Hodgson*.

6. Macacus cristatus. B. M.

Hair of crown short, reflexed, elevated into a narrow linear central longitudinal crest behind; tail longer than the body; fur white. Perhaps an albino.

Hab. ——— ? From a Dutch collection.

See *Macacus philippinensis*, Is. Geoff. Arch. du Mus. ii. t. 33 (albino). The hair of the crown is said to be regular, reflexed, and parallel. The figure shows no crest, but a rather depressed line on the centre of the head. *Hab.* Philippines: Manilla.

7. Macacus cynomolgus. *The Kra.* B. M.

Forehead and crown with short hairs directed backwards and not forming a crest; fur reddish olive, punctuated with black; the limbs greyer; tail black, longer than the body, a line on underside, and the tip, grey.

Macaque à aigrette, *Buffon, H. N.* xiv. t. 20, 21. ? Simia cynomolgus, *Linn.* Macacus cynomolgus, *Desm.* Simia fasciculata, *Raffles* ! Macacus Irus, *F. Cuv.*

Hab. India: Sumatra, *Raffles*.

Var. or *subalbino*. Pale reddish yellow beneath. Borneo. B. M.

Albino. Fur white. B. M.

Var. *Cumingii*. Dark olive, slightly yellow-washed; frontal band and tail blackish; belly and front of thighs whitish; tail longer than body. *Hab.* Philippine Islands. A young specimen, like *M. cynomolgus*, but much darker. The first phalanges of the fingers and toes of *Macacus cynomolgus*, and in some individuals also the second phalanges of the toes, are united by a membrane.—*Cantor, Cat. Mamm. Malay*, p. 6. B. M.

8. Macacus assamensis. B. M.

Forehead and crown with short hair directed backwards; fur grey brown, varied with the white tips to the longer hairs; chin and below whiter; outside of the shoulders, thighs, and limbs darker grey; tail longer than the body.

Macacus assamensis, *M'Clelland, Horsf. P. Z. S.* 1839, p. 148.

Hab. Siam, *Mouhot.*

Like *M. cynomolgus*, but pale grey, without any red shade. Horsfield's type is not in the Museum Collection.

See also

a. *Macacus aureus*, Is. Geoff. Bélanger, Voy. The hair of the crown forms a triangle, edged with white on the sides, with black bristles on the eyebrows, the hair of the triangle directed obliquely; fur red fulvous, hairs waved and striated; outer sides of limbs pale grey; cheeks, neck, and sides of the head with long hairs; face ———? ? *Macacus carbonarius*, var. *pyrrhous*, Blyth. ? *Simia mulatta*, Shaw. *Hab.* India: Bengal, *Leschenault*; Sumatra, *Duvaucel.* This cannot be our pale-yellow *Cynomolgus*, as the outsides of the limbs are like the back, but paler.

b. *Macacus palpebrosus*, Is. Geoff. Cat. p. 92; Arch. du Mus. v. p. 542, note. Fur brown, olive-washed; below white; crown reddish; eyelid and spot on each side, rather below and outside of the eye, white; tail very long. *Hab.* Manilla.

9. Macacus Rhesus. *The Rhesus.* B. M.

The forehead and crown with short reflexed hair; fur grey brown, yellow-washed with the yellow tips to the longer hairs; sides of neck, shoulders, and outsides of fore limbs darker grey; haunches and hinderside of thighs fulvous; tail shorter than the body, brown at the end.

Macaque à queue courte, *Buffon, H. N. Supp.* vii. t. 13. Simia Rhesus, *Audeb.* t. 1. S. erythræa, *Schreb.* Macacus erythræus, *Is. Geoff. Voy. Bélang.* Simia patas, *Link.* Macacus Rhesus, *Desm.* ? M. nipalensis, *Hodgson.*

Var. *M.* (*Pithex*) *pelops*, Hodgson, Journ. Asiat. Soc. Calcutta, ix. p. 1212, figure of head.

Hab. India: Bengal, Nepal, *Hodgson.*

See *Macacus cyclopis*, Swinhoe, P. Z. S. 1862, p. 350, t. 42. Head round; face flat; forehead naked; neck with a ruff-like beard; whiskers dark; tail short, hairy; fur thick, woolly, slate-coloured. *Hab.* Formosa. Called How-tsze or Kaou.

10. Macacus speciosus. *The Brilliant Macaque.* B. M.

Forehead and crown with short reflexed hairs; fur very fine and

soft, yellowish-brown, rather paler and greyer beneath; tail cylindrical, hairy, about the length of the hands.

Macacus speciosus, *F. Cuv. Mamm. Lith.* t. Cercopithecus speciosus, *Lesson.* Inuus fuscatus, *Mus. Leyden.* Inuus speciosus, *Temm. Faun. Japon.* t. !

Hab. Japan.

"*Macacus maurus*, F. Cuv. Mamm. Lith. t., is only from a drawing, and is a very doubtful species."—*Is. Geoff. Cat.* p. 31.

11. **Macacus ochreatus.** *The Ashy-black Macaque.* B. M.

Hair of crown reflexed. Whiskers, arms, inner side and front edge of legs grey. Tail very short.

Papio ochreatus, *Ogilby, P. Z. S.* 1840, p. 56; *Ann. N. H.* vi. p. 517. Macacus fusco-ater, *Schinz, Syn. Mamm.* p. 58. M. ocreatus, *Sclater, P. Z. S.* 1860, p. 420, t. 82 ! M. maurus, *Mus. Leyden.*

Hab. ———. Skeleton in B. M.; the skin was destroyed before it was received.

16. SILENUS.

Head oblong; face rather produced. Neck and chest maned. Tail slender, rather short, ending in a tuft of hair. Fur uniform, not annulated. *Hab.* Asia.

Silenus, *Gray; Lesson.*

Silenus veter. *The Wandervo.* B. M.

Fur black; whiskers and mane grey; tuft of the tail, inside of limbs, and beneath whitish; tail brown.

Var. Mane white.

Simia Silenus, *Linn.* S. veter, *Linn.* Cercopithecus senex, *Zimm.* C. vetulus, *Erxl.* Silenus veter, *Gray, List Mamm. B. M.* p. 8. Simia ferox, *Shaw.* S. leonina, *Shaw.*

Hab. India: Malabar. Introduced and naturalized in China.

17. INUUS.

Head oblong; face elongated, rounded, livid, hairy; crown with short reflexed hairs. Tail very short, reduced to a tubercle. *Hab.* Africa.

Cynocephalus (Magot), *Cuvier & Geoff.* Inuus (Magot), *Geoff.* Magus, *Lesson*, 1827.

Inuus ecaudatus. *The Magot.* B. M.

Fur yellowish brown, black-varied; hair black brown, with pale tips; underside of body and inside of limbs grey.

Pithèque, *Buffon, H. N.* xiv. 87; *Suppl.* vii. t. 23. Magot, *Buffon, H. N.* xiv. t. 7, 8, 9. Simia Inuus, *Linn.* S. vulgaris, *Linn.* S. sylvanus, *Linn.* S. pithecus, *Gmel.* Macacus Inuus, *F. Cuv.* Inuus ecaudatus, *Geoff.* I. pithecus, *Geoff. Cat.* p. 31.

Hab. North Africa: Egypt; Barbary; Morocco. Spain: Gibraltar.

See *Cercopithecus natator*, Fischer, Mém. Mosc. t. 6 (skull), t. 7 (feet). Tail none; hinder feet webbed; brown grey.

18. GELADA.

Head oblong. Face rather produced, rounded. Neck maned; chest naked. Tail cyndrical, moderate, tufted at the end.

Gelada, *Gray, List Mamm. B. M.* 1842. Theropithecus, *Is. Geoff. Arch. du Mus.* 1843; *Dahlbom*, p. 128. Macacus, *Rüppell.* Cynocephalus, *Lesson.*

Gelada Rüppellii. *The Gelada.* B. M.

Face, hands, and callosities deep black; head, whiskers, neck, and sides sooty grey; shoulders, back, rump, and forearms black.

Macacus gelada, *Rüpp. Faun. Abyss.* t. 2.! Gelada Rüppellii, *Gray, List Mamm. B. M.* p. 9! Cynocephalus gelada, *Lesson.* Theropithecus gelada, *Is. Geoff.; Dahlbom.*

Hab. Africa: Abyssinia.

See *Cynocephalus Wagleri*, Agassiz, Iris xxi. 861. t i. ♀, 1828. Face flesh-coloured; hair ashy on the back, then olive, black-tipped; outside of limbs and hands olive, ashy above; callosities and tuft of tail yellowish; tail longer than the body. *Hab.* ——— ? Described from life. Perhaps the young of the Grey Baboon (Ehrenberg). Considered the female Gelada by Lesson, Spec. Mamm. p. 103.

19. CYNOPITHECUS.

Head oblong. Face elongated, rounded, black, bald. Nose broad, flattened behind, nearly to the eyes, sides erect. Crown with a compressed crest. Tail reduced to a tubercle.

Cynopithecus, *Is. Geoff. Voy. Bélanger*, p. 66, 1830. Cynocephalus, *Dahlbom.*

Cynopithecus niger. B. M.

Black or blackish grey; tips of hairs grey.

? Papio æthiops, *Zimmerm.* Cynocephalus niger, *Desm.; Gray, Spic. Zool.* t. 1! *Quoy, Voy. Astrol.* i. t. 67. C. malayanus, *Desmoul.* Simia nigra, *Fischer.* Cynopithecus niger, *Lesson; Is. Geoff.* Macacus niger, *Bennett, Gard. Zool. Soc.* p. 189, fig.!

Var. Browner or greyer. B. M.

Papio nigrescens, *Temm.*! Cynopithecus nigrescens, *Is. Geoff.*

Hab. Philippines.

M. Quoy thinks that the *Macacus maurus*, F. Cuv., is only described from a specimen of this species in a bad state.

Tribe V. CYNOCEPHALINA.

Head elongate. Nostrils at the end of the truncated nose. Hands and feet short. Thumb large. Last lower grinder with five tubercles. Stomach simple.

20. HAMADRYAS.

Tail ending in a tuft of long hair. Neck and shoulders of the males largely maned.

Hamadryas, *Lesson*. Chæropithecus, *Lesson*.

Hamadryas ægyptiaca. *The Tartarin*. B.M.

Ashy grey; whiskers long, slate-coloured; face and ears flesh-coloured; hands black; callosities large, bright red. Female and young without the mane.

Simia hamadryas, *Linn*. S. ægyptiaca, *Hasselq*. S. cynomolgos, *Hasselq*. S. robach, *Forsk*. Cynocephalus hamadryas, *Latr.*; *Desm*. Tartarin, *Buffon*; *Belon*.

Hab. North Africa; Egypt; Arabia; Abyssinia.

21. CYNOCEPHALUS.

Tail moderate, cylindrical. Neck not maned.

Babouin, *Buffon*. Papio, *Erxl.*; *Cuv. & Geoff*. Cynocephalus, *Lacép*. Chæropithecus, *Blainv*.

1. Hands black; nape crested. Species 1.
2. Hands like back.
   a. Nape crested. 2.
   b. Nape not crested. 3, 4.

1. **Cynocephalus porcarius**. *The Chacma*. B. M.

Fur greyish black; head, tail, hands, and feet black. Crest elongated, slender.

Simia porcaria, *Bodd*. S. sphingiola, *Herm*. Papio comatus, *Kuhl*. Cynocephalus porcarius, *Desm*. C. ursinus, *Schinz*. S. nasuta, *Shaw*; *Buffon, Suppl*. viii. t. 15.

Hab. South Africa: Cape of Good Hope.

See *Cynocephalus doguera*, Pucheran. Olive-brown; front of hands black, naked. *Hab*. Abyssinia.

2. **Cynocephalus Anubis**. *The Olive Baboon*. B. M.

Fur olive-green; hairs grey at the base, black and yellow-tinged above; hands and feet like back; crest not full.

Anubis, *F. Cuv. Mamm. Lith.* t. (very imperfectly known, *Is. Geoff.*). Cynocephalus olivaceus, *Is. Geoff. Arch. du Mus.* v. p. 543, note. C. Anubis, *Ogilby, P. Z. S.* 1839, p. 128; 1843, p. 10.

Hab. Guinea.

3. **Cynocephalus Thoth.** *The Thoth.* B. M.

Fur pale grey brown; hair very long, harsh; cheeks, sides of neck, and front of shoulders yellow; end of tail blackish; hands and feet like back.

Cynocephalus Thoth, *Ogilby, P. Z. S.* 1843, p. 11 ! C. sphinx, *Rüppell, Neue Wirbelt.*

Hab. Abyssinia.

4. **Cynocephalus babouin.** *The Baboon.* B. M.

Fur pale brownish yellow; sides of the back rather darker; cheeks whiter; hair of crown elongated; hands and feet coloured like the back. "Nose rather depressed; nostrils large, orbicular."—*Desm.*

Le petit Papion, *Buffon, H. N.* xiv. t. 14. Simia cynocephalus antiquorum, *Schreb.* S. cynocephalus, *Fischer.* S. anomala, *Link.* Cynocephalus babouin, *Desm.; Is. Geoff.*

Hab. West Africa.

5. **Cynocephalus sphinx.** *The Papion.* B. M.

Fur reddish brown, yellowish-washed; cheek and throat paler; hands and feet coloured like the back. "Nostrils narrow, transverse, subtriangular."

Papion, *Buffon, H. N.* xiv. t. 13. Simia sphinx, *Linn.* S. cynocephalus, *Brong.* Cynocephalus papio, *Desm.* C. sphinx, *Latr.*

Hab. West Africa: Guinea; Senegal; island of Minere.

See also

a. *Cynocephalus choras*, Ogilby, P. Z. S. 1843, p. 12. Callosities dark-brown. *Hab.* Central Africa. (Niger Expedition.)

b. *Papio rubescens*, Temm. Esq. Zool. Guinea, p. 39. East Africa.

22. CHÆROPITHECUS.

Tail very short, erect, hairy all round. Face two-grooved, black, with pale beard and whiskers. Limbs slender.

Chæropithecus leucophæus. *The Drill.* B. M.

Fur brown; forehead and crown whiter; shoulders and limbs darker.

Simia cinerea, *Shaw.* S. subflava, *Shaw.* S. leucophæa, *F. Cuv. Mamm. Lith.* iv. p. 637. Inuus brachyurus, *Temm.* Papio leucophæa, *Gray, List Mamm. B. M.* p. 10.

Hab. Africa.

23. MORMON.

Tail very short, bald beneath, erect. Face grooved, bright-coloured when adult. Limbs strong.

Mandrill, *Cuvier*. Mormon, *Lesson*. Papio, *Gray*, *List Mamm. B. M.*

Mormon maimon. *The Mandrill.* **B. M.**

Black, yellow-ringed; middle of crown, dorsal line, hinder edge of mane, and sides of body blacker; sides of mouth pale.

Choras, *Buffon*, *H. N.* xiv. t. 16, 17; *Supp.* xvi. t. 9. Simia maimon, *Linn.* S. mormon, *Linn.* S. madarogaster, *Zimm.*

Young. Nose black.

Simia maimon, *Schreb.* S. sphinx, *Shaw*.

Hab. Africa; Gaboon.

The *Mantiger* of Bradley (the Tufted Ape of Pennant) is from a specimen of this animal, which had been partly shaved; and the Goat Monkey, Pennant, is one which had a tail added to it when stuffed.

Family III. CEBIDÆ.

Nostrils opening on the sides of the nose, separated by a broad space. Grinders $\frac{6}{5}.\frac{6}{5}$ or $\frac{6}{6}.\frac{6}{6}$ acutely tubercular. Cheek-pouches none. Buttocks hairy. Tail long, hairy, often prehensile, very rarely short. Thumb distinct, but rarely opposable to the fingers. *Hab.* America, tropical or subtropical.

The nostrils of *Nyctipithecus* are near, as in the old-world monkeys; but in the teeth and all other characters it is like the *Cebidæ*.

Synopsis of Tribes and Genera.

Section A. Gymnura. *The tail elongate, prehensile, strongly revolute; under surface of the tip naked, callous. Cutting-teeth erect; grinders* $\frac{5}{5}.\frac{5}{5}$. *The nostrils far apart.*

Tribe I. Mycetina. *The throat swollen. Windpipe dilated. Hinder part of lower jaw much dilated.*

1. Mycetes.

Tribe II. Lagotrichina. *The throat not swollen. Windpipe not dilated. Hinder part of lower jaw not, or only moderately, dilated behind.*

2. Ateles. Fur rigid, harsh. Claws guttered. Thumbs rudimentary, or none. Lower jaw not dilated. Nostrils far apart. Hair of crown directed forwards.

3. Brachyteles. Fur woolly, soft. Thumbs rudimentary, or none. Lower jaw moderately dilated behind. Claws compressed. Nostrils far apart. Hair of crown directed backwards.

4. Lagothrix. Fur woolly, soft. Thumbs developed. Lower jaw mo-

derately dilated behind. Claws compressed. Nostrils oblong, rather close below. Hair of crown woolly.

Section B. TRICHIURA. *Tail hairy to the tip, not, or only feebly, prehensile.*

Tribe III. CEBINA. *Grinders* $\frac{6}{6}.\frac{6}{6}$; *cutting-teeth vertical, in a regular series with the canines. Claws blunt. Lower jaw not dilated behind. Nostrils far apart.*

5. CEBUS. Head large. Claws guttered.

Tribe IV. CALLITRICHINA. *Grinders* $\frac{6}{6}.\frac{6}{6}$; *cutting-teeth vertical, in a regular series with the canines. Lower jaw dilated behind. Eyes moderate, diurnal. Nostrils far apart.*

6. SAIMIRI. Head large, elongate; forehead well developed.

7. CALLITHRIX. Head small, depressed; forehead small.

Tribe V. NYCTIPITHECINA. *Grinders* $\frac{6}{6}.\frac{6}{6}$; *cutting-teeth vertical, in a regular series with the canines. Lower jaw dilated behind. Eyes very large, nocturnal. Nostrils close together, as in the old-world apes.*

8. NYCTIPITHECUS. Head large, rounded; forehead slightly developed.

Tribe VI. PITHECINA. *Grinders* $\frac{6}{6}.\frac{6}{6}$; *lower cutting-teeth large, shelving, converging, separate from the canines. Lower jaw not dilated behind. Fur harsh, elongate. Claws blunt.*

9. PITHECIA. Tail club-shaped. Hair of crown like a wig. Chin slightly bearded.

Tribe VII. BRACHYURINA. *Grinders* $\frac{6}{6}.\frac{6}{6}$; *lower cutting-teeth large, shelving, converging, separate from the canines. Lower jaw dilated behind. Fur soft, silky. Claws blunt.*

10. CHIROPOTES. Tail elongate, club-shaped. Crown with long hair like a wig. Chin large, bearded. Limbs short.

11. OUAKARIA. Tail subcylindrical, short. Crown with short hairs. Chin scarcely bearded. Limbs elongate.

Tribe VIII. HAPALINA. *Grinders* $\frac{4}{4}.\frac{4}{4}$; *lower cutting-teeth vertical. Lower jaw not dilated behind. Thumbs developed, but never opposable to the fingers.*

* *Lower cutting-teeth elongate, slender, linear, of the same size as the canines.*

12. HAPALE. Ears with a fan-like pencil of hairs on the inside of the conch.

13. IACCHUS. Ears with a fan-like pencil of long hairs on forehead in front of the conch.

14. CEBUELLA. Ears small, naked, hid in the fur.

15. MICO. Ears large, naked, exserted, without any pencil of hairs.

** *Lower cutting-teeth short, subtruncate; lower canines large, prominent.*

16. LEONTOPITHECUS. Head and face with long silky hair.

17. ŒDIPUS. Sides of the head naked; crown with a tuft of hairs.

18. Midas. Head with short hairs.

19. Seniocebus. Head naked in front, hairy behind.

Dahlbom arranges the prehensile-tailed monkeys according to their anatomical character, thus:—

I. Muzzle obtuse, conical; spinous processes of the lumbar vertebræ acutely triangular, directed more forward than the rest, nearly incumbent.

a. Eyes very large, lateral; septum of nose narrow. *Nyctipithecus.*

b. Eyes moderate, anterior; septum of nose broad. *Callithrix.*

II. Muzzle blunt, truncated; spinous processes of the lumbar vertebræ trapeziform.

a. Tail hairy all over.

* Septum of the orbit membranaceous. *Saimiri.*

** Septum of the orbit bony. *Cebus.*

b. Tail-end bald. *Ateles, Lagothrix, Mycetes.* (Zool. Stud. p. 146.)

Section A. Gymnura. *Tail elongate, prehensile, strongly revolute, hairy; under surface of the tip naked, callous. Grinders* $\frac{5}{5}$. $\frac{5}{5}$.

Tribe I. MYCETINA.

Head pyramidical; face oblique; chin and crop gibbous, covered with long rigid hairs. Canines large. Lower jaw much dilated behind. Os hyoides very large, spongy. Thumb distinct. Claws convex. Tail very long. Ferocious, noisy before the rising and after the setting of the sun. Living on leaves of trees.

1. MYCETES.

Head pyramidical. Face and the lower part of the body nearly naked. Tail strong. Fingers very long.

Mycetes, *Illiger*; *Gray. Ann. & Mag. N. H.* 1845, xvi. p. 217. Stentor, *Geoff.* Aluata, *Lacép.* Cebus, *Erxl.* Aluatta, *Slack.*

Spix describes the male and the female *M. caraya* as being black, and the young yellow. Prince Neuwied observes that the males and the specimens of *M. ursinus* from the more northern region of Brazil are rufous or ferruginous, while the females and those from the more southern regions are brown or blackish brown. Lichtenstein describes the young of this species as blackish. Cuvier observes that there is very little difference between *M. ursinus* and *M. seniculus*. The specimens of the two sexes that are in the British Museum, received at the same time and from the same locality, are nearly the same colour, and the young and adults equally so; but some specimens of apparently the same species vary considerably in tint; some of the black species show so many red hairs scattered among their

fur, when it is bent back and examined, as to make one almost doubt if the black specimens are not another state or local variety of the red ones.—*Ann. and Mag. N. H.* 1845, xvi. p. 217.

M. I. Geoffroy states there can be no doubt that *M. niger* and *M. stramineus* of Geoffroy are the same species, *M. niger* being the males, and *M. stramineus* the females and young. There are in the Jardin des Plantes young males changing into the black state. *Stentor flavicaudatus*, Geoff., is a variety, and *S. fuscus*, Geoff., a pale specimen of *Mycetes ursinus*. (See Cat. Mus. Paris, p. 53.)

Slack observes, "Dr. Gray lays great stress upon the texture of the hairs as a specific distinction. In *M. seniculus* the hairs of the adult are soft to the touch, while those of the young are hard and rigid." —*Journ. Acad. N. S. Phil.* 1862, p. 516.

The species may be divided thus:—

1. Forehead high, with the hair reflexed, forming a ridge across the centre of the crown.
   a. The fur rather rigid in 1, 2, 3.
   b. Fur soft, silky, elongate, 4, 5.

2. Forehead with the hair directed forward; crown smooth, with radiating hairs.
   a. Fur short, rather rigid in 6, 7, 8.
   b. Fur rather soft, 9.
   c. Fur very long, silky, 10.

1. **Mycetes ursinus.** *The Araguato.* B. M.

Brown or blackish, yellow-washed; hairs rather rigid, brown, with yellowish tips. Male, female, and junior.

Mycetes ursinus, *Desm. Mamm.; Pr. Max. Abbild.* t.; *Gray, Ann. & Mag. N. H.* 1845, xvi. p. 218. Stentor flavicaudatus, *Geoff.* Simia ursina, *Humb.* S. guariba, *Humb.* Mycetes fuscus, *Kuhl; Spix, Bras.* t. 30.

Var. Yellow; the tail, head, feet, sides of the head, body, and limbs yellow. Male. B.M.

M. stramineus, *Spix, Bras.* t. 31. M. barbatus, fœm., *Spix, Bras.* t. 33.

Hab. Brazil.

2. **Mycetes seniculus.** *The Golden Howler.* B.M.

Reddish chestnut; middle of the back golden yellow; hair one-coloured to the base, short, rather rigid, without any underfur; hair of the head short. Males and females.

Alouate, *Buff. H. N.* xv. p. 5; *Suppl.* vii. t. 15. Simia seniculus, *Linn. S. N.* i. p. 37; *Gray, Ann. & Mag. N. H.* 1845, xvi. p. 219. Mycetes seniculus, *Kuhl.* Royal Monkey, *Penn.*

Hab. Brazil; Guiana. In Bolivia a paler variety.

3. **Mycetes bicolor.** *The Black-and-yellow Howler.* B. M.

Black; hair rather rigid, uniform; sides of the loins varied with yellow; hairs of this part black, with a broad subcentral reddish-yellow band. Male.

Mycetes bicolor, *Gray, Ann. & Mag. N. H.* 1845, xvi. p. 214!

Hab. Brazil.

Like *M. seniculus*. Dr. Slack thinks this may be the same as *M. ursinus*.

See *Aluatta nigra*, Journ. Acad. Phil. 1862, 518. "Male deep black; hairs of occiput directed forwards, meeting at right angles those of the forehead, which are directed backwards. Female and young pale straw-colour, dashed with black." *Hab.* Brazil; Paraguay.

4. **Mycetes laniger.** *The Silky Howler.*

Reddish chestnut; middle of the back golden yellow; hairs elongate, very soft and silky, dark brown at the base, golden or chestnut at the tip, with a close underfur; hair of the head rather elongate. Males and females.

Mycetes laniger, *Gray, Ann. & Mag. N. H.* 1845, xvi. p. 214!

Var. End of tail paler.

Stentor chrysurus, *Is. Geoff. Mag. Zool.* iv. t. 7.

Hab. Columbia.

Dr. Slack (*l. c.* p. 517) considers this undoubtedly the same as *M. seniculus*.

5. **Mycetes palliatus.** *The Mantled Howler.* B. M.

Black brown; hairs of the middle of the back and upper part of the sides yellow brown, with black tips; of the lower parts of the sides elongate, brownish yellow, forming a kind of mantle on each side.

Mycetes palliatus, *Gray, P. Z. S.* 1848, p. 138, t. 6! M. Beelzebul, *Schott, Mitteler Report*, 1862, p. 413. Aluatta palliata, *Slack, Journ. Acad. Phil.* 1862, p. 510.

Hab. Caraccas, *Sallé*.

** *Forehead with the hair directed forward; crown smooth, with radiating hairs.*

6. **Mycetes auratus.** *The Red-and-yellow Howler.* B. M.

Dark red chestnut-brown; back and sides golden yellow; hairs rather short and rigid, dark at the base; beard darker. Female?

Mycetes auratus, *Gray, Ann. & Mag. N. H.* 1845, xvi. p. 220!

Hab. Brazil.

7. **Mycetes caraya.** *The Black Howler.* B. M.

Black; hair rather elongate and rigid, uniform black; the sides, especially at the loins, interspersed with reddish hairs. Male.

Simia caraya, *Humboldt.* Mycetes caraya, *Lesson; Gray, Ann. & Mag. N. H.* 1845, xvi. p. 220 ! Mycetes niger, *Pr. Max. Abbild.* t.

Hab. Brazil.

8. **Mycetes barbatus.** *The Grey-handed Howler.* B. M.

Black; hair moderately long, rather rigid, one-coloured; hands, feet, inside of the thighs, circumference of the face, and end of the tail greyish. Sex unknown.

Mycetes barbatus, *Spix, Bras.* t. 33 (male); *Gray, Ann. & Mag. N. H.* 1845, xvi. p. 220!

Hab. Brazil.

9. **Mycetes Beelzebul.** *The Yellow-handed Howler.* B. M.

Black; hair rather soft, uniform black or reddish, with a few interspersed brown hairs on the shoulders; feet, upper line and tip of the tail, spot in front of the ear, and on the knee reddish-yellow. Females and young.

Simia Beelzebul, *Linn.* Mycetes rufimanus, *Kuhl.* M. Beelzebul, *Gray, Ann. & Mag. N. H.* 1845, xvi. p. 220! ? M. discolor, *Spix, Bras.* t. 34. Colobus ?? chrysurus, *Gray, Ann. & Mag. N. H.* 1866, xvii. p. 77.

Hab. Brazil.

10. **Mycetes villosus.** *The Villous Howler.* B. M.

Black; hairs very long, silky, uniform black on the cheeks and under the ears, brownish at the base. Sex unknown.

Mycetes villosus, *Gray, Ann. & Mag. N. H.* 1845, xvi. p. 226 !

Hab. Brazil.

Tribe II. LAGOTRICHINA.

Head round, face perpendicular. Canines small. Throat not swollen. Hinder part of the lower jaw not, or only moderately, dilated. Melancholic, slow, living in groups. Eating insects and fruit.

A. *Fur dry, harsh. Hair on the head directed forward. Lower jaw not dilated behind.*

2. ATELES.

Fur dry, hard, smooth. Cutting-teeth large, unequal, two middle very long and broad. Grinders small, rounded. Thumb rudimentary,

or none. Lower jaw not dilated behind. Chin and throat nearly bald. The hair of the head directed forwards, of the forehead sometimes reflexed.

Sapajou, *Lacép.* 1800; *Slack, Proc. Acad. Philad.* 1862, p. 509. Ateles, *Geoff. Ann. du Mus.* 1806.

Stomach slightly subdivided, approaching in this respect the long-handed Monkeys of India and Africa.

a. Inside of the legs coloured like the back. Species 1–10.
b. Inside of the legs white. 11, 12.

* *The inside of the legs coloured like the back.*

1. **Ateles ater.** *The Black-faced Coaita.* B. M.

Black; face black; hair of crown short, of forehead moderate. *Young.* Brown.

A. paniscus, var. cayennensis, *Geoff.* A. ater, *F. Cuv. Mamm. Lithog.* t.

Hab. Brazil.

2. **Ateles paniscus.** *The Coaita.* B. M.

Black; face flesh-coloured; orbits prominent; fur of forehead elongate, projecting.

Coaita, *Buff, H. N.* xv. 16, t. 1. Simia paniscus, *Linn. S. N.* i. p. 27. Ateles paniscus, *Geoff.*

Var. Thumb more or less rudimentary (sometimes only developed on one hand). B. M.

A. subpentadactylus, *Desm.* Simia chameck, *Humb.* Chameck, *Buff. H. N.* xv. p. 21. A. pentadactylus, *Cuv.; Geoff. l. c.* vii.

Hab. Guiana; Brazil; Peru.

3. **Ateles fusciceps.** *The Brown-headed Spider Monkey.* B. M.

Black; hairs rather long, shining, crisp, the longer ones with indistinct brownish tips; crown of the head rusty brown.

Ateles fusciceps, *Fraser, MS.* 1845; *Gray, Proc. Zool. Soc.* 1865!

Hab. South America.

4. **Ateles grisescens.** *The Grizzled Spider Monkey.* B. M.

Fur moderate, black, with silvery-white hairs intermixed; the underside of the tail grey; the hair of the forehead rather elongate.

The Grizzled Spider Monkey, *Sclater, Cat. Anim. Zool. Gard.* 1865, p. 6. A. grisescens, *Sclater, MS.*; *Gray, P. Z. S.* 1865!

Hab. South America.

5. **Ateles cucullatus.** *The Black-capped Spider Monkey.* B. M.

Fur very long and flaccid, black, silvery grey; the crown and nape, the hands, and feet black; sides of the rump blackish; hair of the

crown very long, forming a large hood expanding over the eyebrow; face reddish; orbits blackish; thumb none; hair of the back one-coloured grey or black.

Ateles cucullatus, *Gray, P. Z. S.* 1865 !

Hab. South America.

6. **Ateles marginatus.** *The Chuva.* B. M.

Uniform black; forehead and whiskers white; hair moderately long; face flesh-coloured; orbits black; thumb none.

Ateles marginatus, *Kuhl, Beitr.* p. 24; *Geoff. Ann. Mus.* xiii. p. 92, t. 10. A. albifrons, *Schinz.* A. frontalis, *Benn. P. Z. S.* 1830–31 !

Hab. Brazil.

7. **Ateles hybridus.** *The Brown Spider Monkey.* B. M.

Ashy grey, blackish-washed; hair very soft, rather curly, intermixed with some longer, stiffer, blackish hairs; crown of the head, forearms, legs to the knees, and the greater part of the tail black; face blackish ?, with thin white hair on the lips; thumb none.

Ateles hybridus, *Geoff. Ann. Mus.* xvii. p. 121; *Guérin, Mag. Zool.* 1865, t.

Hab. St. Juan, Nicaragua.

The eyebrows are black, and there are many elongate black hairs on the outside of the thigh; the inside of the thigh and of the arm near the arm-pit is greyish.

Dr. Dahlbom, I suppose by mistake, describes the inside of the leg as white.

8. **Ateles melanochir.** *The Black-handed Spider Monkey.* B. M.

Pale brown, or red brown; forehead, hands, and feet black; crown, browner red; the knee and front of fore leg often darker or blackish; thumb none.

Ateles melanochir, *Desm. Mamm.* p. 76. A. Geoffroyi, *Kuhl.* A. variegatus, *Natterer; Reichenbach, Atlas*, f. 15, 16.

Var. Pale yellowish; forehead, feet, and knees black; crown yellowish, black-washed; shoulders grey, black-washed. B. M.

Var. Pale yellowish white; shoulders and knees blackish-washed; forehead, hands, and feet black; crown golden brown on the sides, black in the centre. B. M.

Hab. Carraccas, *Sallé.*

Var. ? *frontatus.* Pale reddish brown; the forehead, feet, knees, and front of fore legs, blackish. B. M.

Eriodes frontatus, *Gray, Ann. & Mag. N. H.* x. 256, 1843; *Zool. H.M.S. Sulphur*, t.

Hab. West coast of America ?

9. **Ateles ornatus.** *The Brilliant Spider Monkey.* B. M.

Black; sides and underparts of body and inside of upper arms and legs red brown; lower legs reddish; withers, outer sides of shoulders, and forearms white-grizzled; whiskers grey; thumb none.

Hab. South America.

Like *A. melanochir* with all the colour intensified; but the forehead and whole upper part of the head and the outside of the arms and legs is black.

10. **Ateles albifrons.** *The White-fronted Spider Monkey.* B. M.

Pale grey brown; forehead white; crown darker brown; tail, outside of the limbs, feet, and groin reddish; knees, elbows, and hands black; outer and hinder side of the forearm blackish-washed; thumb none.

Hab. South America. Presented by General Fox.

It differs from the pale varieties of *A. melanochir* in the forehead being white, fringed below with the dark hairs of the eyebrows, and in the feet being red. It may be only a variety.

** *The inside of the legs and underside of the body white.*

11. **Ateles Belzebuth.** *The Belzebuth.* B. M.

Black or reddish; loins paler; chest, belly, and inside of the fore legs, front of the thighs and the under surface of the tail whitish; hair rather elongate, flaccid; thumb none.

Belzébuth, *Brisson, R. A.* p. 214. Ateles Belzebuth, *Geoff. Ann. Mus.* xiii. p. 27, t. 16. A. Brissonii, *Fischer.* A. fuliginosus, *Kuhl.*

Var. 1. Black or blackish; loins paler; head and limbs black. B. M.

Var. 2. Blackish; loins and part of sides, head, and limbs brown black. B. M.

Var. 3. Grey; head, shoulders, feet, tail, and outside of the limbs black; underside of the body and inside of legs grey. B. M.

Var. 4. *brunneus.* Brown, or brown-washed grey; cheek, loins, and outside of the thighs whiter; chest, throat, inside of limbs pale grey; crown, outside of limbs, and upper surface of tail darker brown. B. M.

A. brunneus, *Gray, MS.*

Hab. Brazil.

12. **Ateles vellerosus.** *The Long-haired Spider Monkey.* B. M.

Blackish; loins rather browner; head, outside of limbs, and the upper and lower part of the tail black; throat, chest, belly, and inside of the limbs greyish white; hair long, flaccid. Thumb none.

Ateles vellerosus, *Gray, P. Z. S.* 1865!

Hab. Brazil.

Like *A. Belzebuth*; but the underside of the tail is as black as the upper, the pale colour of the inside of the arms does not come down so near the hands, and the fur is much longer and spreads out in all directions on the head and body.

B. *Fur soft, silky. Lower jaw moderately dilated behind. Hair of head turned backwards.*

3. BRACHYTELES.

Hair woolly, soft; of head short, directed backwards. Cutting-teeth equal, small; canines short; grinders very thick, quadrangular. Septum of the nose rather narrow. Thumb rudimentary or wanting. Claws compressed. Tail very strong.

Brachyteles (partly), *Spix, Bras.* p. 36, 1823; *Slack, l. c.* p. 513. Eriodes, *I. Geoff. Mém. Mus.* xviii.

Gregarious in the woods of Central America.

Brachyteles arachnoides. B.M.

Ashy brown; face flesh-coloured; base of tail and vent often ferruginous; organ of generation dark red-brown. Females more ashy.

Var. without any thumb. B. M.

Ateles arachnoides, *Geoff. Ann. Mus.* xiii. p. 270. Eriodes arachnoides, *Is. Geoff. Mém. Mus.* xvii. Brachyteles arachnoides, *Gray, List Mamm. B. M.* !

Var. with a well-developed thumb, young. Dark brown, sides of face white. B. M.

Var. with rudimentary thumb. B. M.

Ateles hypoxanthus, *Pr. Max. Abbild.* t.; *Kuhl; Desm. Mamm.* p. 72. Eriodes tuberifer, *I. Geoff. l. c.* xii. p. 271. Brachyteles macrotarsus, *Spix, Bras.* p. 36, t. 27. Eriodes hemidactylus, *I. Geoff. l. c.* xiii. p. 270. B. hypoxanthus, *Gray, List Mamm. B. M.* p. 11.

Hab. Brazil.

Thumb more or less rudimentary; the species have been divided into three on this account by M. I. Geoffroy; sometimes there is a thumb on one hand and none on the other. See *Slack, l. c.* p. 514.

4. LAGOTHRIX.

Hair soft, woolly, black. Thumbs well developed. Limbs short, proportionate. Chin and crop sparingly hairy. Hair of crown short, directed backwards. Throat-bone scarcely apparent externally. Lower jaw moderately dilated behind. Nostrils oblique, rather close below.

Lagothrix, *Geoff. Ann. Mus.* xix. p. 106, 1812. Gastrimargus, *Spix, Bras.* 1823.

Slow, gregarious, meek; often walking on their hind legs.

1. Lagothrix Humboldtii. *The Grey Capparo.* B. M.

Blackish grey; hairs dark grey, with very short black tips; head, chest, belly, hands, and tail black; hair of the belly rather longer, weaker. Young greyer.

Lagothrix Humboldtii, *Geoffroy, Tab. Quad.* Cebus lagothrix, *Fischer.* Simia lagotricha, *Humboldt, Obs. Zool.* i. p. 322. L. canus, *Geoff. Tab. Quad.* Simia cana, *Humb.*

Var.? L. pœppigii, *Schinz.* L. capparo, *Lesson.* Gastrimargus olivaceus, *Spix, Bras.* t. 28 (male, good), 1823.

Hab. Peru; mouth of Orinoco; Columbia.
The young are paler and less speckled.

2. Lagothrix infumatus. *The Reddish Capparo.* B. M.

Dark reddish grey; hairs reddish, with black tips; the head and hands rather darker; inside of forearms, chest, and belly black; groin, base of the tail, and sides redder; hair of chest and belly abundant, long, and rather rigid. Male.

Gastrimargus infumatus, *Spix, Bras.* p. 41, t. 29, female. Lagothrix Castelnaui, *Is. Geoff. Castelnau Expéd. Amér. Sud,* t. i. female.

Hab. Brazil.

Section II. TRICHIURA. *Tail long, hairy to the end, not, or only feebly prehensile. Tongue-bone not prominent. Head round. Muzzle short.*

Tribe III. CEBINA.

Grinders $\frac{6}{6}$. $\frac{6}{6}$, bluntly tubercular; cutting-teeth erect, contiguous to the canines; canines large. Lower jaw not dilated behind. Limbs proportionate. The septum of the orbits bony. Tail very long, hairy; end convolute. Penis with an expanded marginal gland. Gregarious, lively, wanton. Living on fruit and insects.

5. CEBUS.

The character of the tribe.

Cebus (partly), *Erxl.*

In Burmeister's Monograph in Abh. naturf. Ges. zu Halle, vol. ii., he divides the genus thus:—

* *Lumbar vertebræ* 5. *Head large.*

CEBUS FATUELLUS, Linn. *S. Apella,* Linn.; Buffon, xv. t. 4. *C. frontatus,* Kuhl. (Old) *S. fatuellus,* Linn.; Buffon, Supp. vii. t. 29. ? *C. niger,* Geoff. *C. lunatus,* Kuhl. *C. Azaræ,* Rengger.

CEBUS ROBUSTUS, Pr. Max. (Old) *C. cirrifer,* Geoff.

C. MONACHUS, F. Cuv. Mamm. Lith. t. 76, p. 31. *C. œanthosternus*, Pr. Max. *C. œanthocephala*, Spix.

** *Lumbar vertebræ* 6. *Head small.*

C. CAPUCINUS. (Old) *C. flavus*, Geoff. (Var.) *C. fulvus*, Desm. *C. gracilis*, Spix. *C. chrysopus*, F. Cuv. *S. albifrons*, Humboldt. *C. nigro-vittatus*, Natterer.

C. CIRRIFER, Pr. Max. *C. niger*, Geoff.; Buff. Supp. vii. t. 28. *C. cristatus*, F. Cuv.

C. HYPOLEUCUS, Geoff.; Buffon, v. t. 9.

There are many skulls of this genus in the Museum from very differently coloured specimens. The adult ones are very much alike in size, external form, and in dentition, offering no important characters by which they can be divided into groups. (See Gray, P. Z. S. 1865.)

Dr. Dahlbom arranges the specimens in the Paris Museum in his "Tabula Synoptica," p. 164, thus:—

I. The hair of the crown erect, subfasciculate.—1. *C. robustus*; 2. *C. elegans*; 3. *C. Pucheranii*=*C. capucinus*, Geoff.; 4. *C. elegans*, var. 5. *C. frontatus*; 6. *C. cirrifer*; 7. *C. vellerosus.*

II. Hair of the crown adpressed.

a. The beard of the cheek and throat very diffused.—8. *C. barbatus*; 9. *C. variegatus.*

b. Beard of cheek and throat less prominent; crown defined with a pale edge.—10. *C. flavus*; 11. *C. Apella.*

c. Cheek, chin, and throat hairy.—12. *C. capucinus*; 13. *C. castaneus*; 14. *C. versicolor*; 15. *C. chrysopus.*

In the compilation of Lesson, Wagner, and Giebel, who depended upon the descriptions of authors, without having the opportunity of examining specimens to correct their theories, the species are mixed together in a manner that is not confirmed by reference to the specimens themselves, showing how dangerous it is to venture in such compilations to go beyond the authors consulted.

There seems to be a considerable difference in the length of the toes of the stuffed specimens, and I considered it a good character; but I now suspect that it may depend on age (as the younger stuffed specimens always appear to have longer fingers and toes than the older ones), and perhaps more on the art of the preserver.

The species may also be divided thus, by the colour of the fur:—

The greater number of specimens have the front of the fore legs and chest pale.

I. Fur black or brownish-black.—*C. leucogenys, C. cirrifer, C. vellerosus, C. leucocephalus, C. hypoleucus.*

II. Fur yellow, or yellow-and-brown, or brown-and-yellow

Var.? or artificially distorted. Hair of crown radiating from a central line forming an oblong crest. B. M.

C. cristatus, *Gray, MS.*

Hab. Brazil.

7. **Cebus xanthocephalus.** *The Monk Cebus.* B. M.

Fur short, stiff, black- and yellow-varied; crown, temples, whiskers, chin, shoulders, haunches, arms, legs, and tail black; back and sides, especially behind, yellow, more or less black-washed; sides of neck, chest, and front of shoulders yellow. The hair of the crown reflexed, short; forehead and temples whitish yellow.

Var. 1. Shoulders and loins pale-yellow; outside of thighs and base of tail reddish.

Var. 2. Blacker; forehead whiter.

Cebus xanthocephalus, *Spix, Bras.* t. 3 (good). C. monachus, *Fischer.* C. cucullatus, *Spix, Bras.* t. 6.

Hab. Paraguay; Rio Janeiro, *Spix.*

See *Cebus olivaceus*, Schrank, Wagner, Schreb. v. t. 8.

8. **Cebus albifrons.** *The White-fronted Cebus.* B. M.

Pale reddish brown; back and, especially, the outside of limbs redder; face, forehead, throat, shoulders, and chest white. Tail with rather long hair; hair of the crown short.

C. albifrons, *Gray, P. Z. S.* 1865! not *Geoffroy.*

Hab. South America.

9. **Cebus hypoleucus.** *The White-throated Sapajou.* B.M.

Black; forehead and front of crown, neck and sides of head, shoulders and chest white; face pale flesh-coloured.

Sai à gorge blanche, *Buffon, H. N.* xv. t. 9; *Audebert*, t. 5; *F. Cuv. Mamm. Lith.* t. Simia hypoleuca, *Humboldt, Obs. Zool.* p. 337. Cebus hypoleucus, *Geoff. Ann. Mus.* xix. p. 111.

Hab. Central America; Guiana; Caraccas, *Salvin.*

10. **Cebus leucocephalus.** *The White-headed Cebus.* B. M.

Fur dark reddish brown, very obscurely punctulated. Head to the front edge of ears white; crown with a short narrow central black streak; feet blackish.

Cebus leucocephalus, *Gray, P. Z. S.* 1865, fig.!

Hab. Columbia.

See *Cebus versicolor*, Pucheran, Rev. Zool. 1845, p. 335; I. Geoff. Cat. p. 47. Without frontal streak, and tail paler, perhaps discoloured. *Hab.* Columbia.

3. **Cebus pallidus.** *The Slender Cebus.* B.M.

The crown-patch on the back of the head, small, blackish or brown, often with a small short crest on each side. Fur soft, fulvous or greyish fulvous; the limbs and tail darker brown; beard golden yellow.

Cebus pallidus, *Gray, P. Z. S.*; *List Mamm. B. M.*! C. elegans, *I. Geoff. Cat.* p. 45, 1851. ? C. gracilis, *Spix, Bras.* t. 5 (young).

Hab. Bolivia, *Bridges* !

See

a. *C. barbatus*, Geoff. Fur nearly uniformly fulvous; forehead whitish; occiput rather darker; beard golden yellow. Var. albino, *Cebus albus*, Geoff.

b. *C. flavus*, Geoff. *Simia flava*, Schreb. Fur brownish fulvous or pale fulvous; forehead white, black, or brown; spot on crown and occiput pointed in front. Albino variety, *C. fulvus*, D'Orbigny, Voy. t. *Hab.* Bolivia.

4. **Cebus cirrifer.** *The Tufted Cebus.* B. M.

Fur short, close, black; face, chin, cheeks, sides of forehead, and narrow band over the eyebrow yellowish white, with interspersed blackish hairs; hair of the head reversed, sometimes erected into two long bent-back tufts.

Cebus cirrifer, *Geoff.*

Hab. South America.

5. **Cebus vellerosus.** *The Thick-furred Cebus.* B. M.

Fur very thick, elongated, blackish brown, with longer shining hairs; the top of the head, nape, and whiskers black; limbs and tail blackish; crown-spot black, narrow, produced on the sides into two thick erect pencils.

Cebus vellerosus, *I. Geoff. Cat.* p. 44.

Hab. Brazil, *Lord Stuart de Rothsay.*

The Museum specimen does not show the white hairs scattered in the fur mentioned by M. I. Geoffroy. It differs from most *Cebi* in the front of the shoulders being like the back.

III. *Hairs of crown short, reflexed, adpressed; not forming a crest or horns.*

6. **Cebus capucinus.** *The Capuchin.* B. M.

Fur brown, washed with golden; sides of forehead, face, throat, chest, and front of shoulders pale yellow; crown with black or dark-brown spot, narrow and extended, with a line to the base of the nose in front, and expanded on the nape.

Cebus capucinus, *Geoff.* *Var.*? C. libidinosus, *Spix, Bras.* t. 2.

Hab. Brazil.

Var.? or artificially distorted. Hair of crown radiating from a central line forming an oblong crest. B. M.

C. cristatus, *Gray, MS.*

Hab. Brazil.

7. **Cebus xanthocephalus.** *The Monk Cebus.* B. M.

Fur short, stiff, black- and yellow-varied; crown, temples, whiskers, chin, shoulders, haunches, arms, legs, and tail black; back and sides, especially behind, yellow, more or less black-washed; sides of neck, chest, and front of shoulders yellow. The hair of the crown reflexed, short; forehead and temples whitish yellow.

Var. 1. Shoulders and loins pale-yellow; outside of thighs and base of tail reddish.

Var. 2. Blacker; forehead whiter.

Cebus xanthocephalus, *Spix, Bras.* t. 3 (good). C. monachus, *Fischer.* C. cucullatus, *Spix, Bras.* t. 6.

Hab. Paraguay; Rio Janeiro, *Spix.*

See *Cebus olivaceus*, Schrank, Wagner, Schreb. v. t. 8.

8. **Cebus albifrons.** *The White-fronted Cebus.* B. M.

Pale reddish brown; back and, especially, the outside of limbs redder; face, forehead, throat, shoulders, and chest white. Tail with rather long hair; hair of the crown short.

C. albifrons, *Gray, P. Z. S.* 1865! not *Geoffroy.*

Hab. South America.

9. **Cebus hypoleucus.** *The White-throated Sapajou.* B.M.

Black; forehead and front of crown, neck and sides of head, shoulders and chest white; face pale flesh-coloured.

Sai à gorge blanche, *Buffon, H. N.* xv. t. 9; *Audebert,* t. 5; *F. Cuv. Mamm. Lith.* t. Simia hypoleuca, *Humboldt, Obs. Zool.* p. 337. Cebus hypoleucus, *Geoff. Ann. Mus.* xix. p. 111.

Hab. Central America; Guiana; Caraccas, *Salvin.*

10. **Cebus leucocephalus.** *The White-headed Cebus.* B. M.

Fur dark reddish brown, very obscurely punctulated. Head to the front edge of ears white; crown with a short narrow central black streak; feet blackish.

Cebus leucocephalus, *Gray, P. Z. S.* 1865, fig.!

Hab. Columbia.

See *Cebus versicolor*, Pucheran, Rev. Zool. 1845, p. 335; I. Geoff. Cat. p. 47. Without frontal streak, and tail paler, perhaps discoloured. *Hab.* Columbia.

11. **Cebus flavescens.** *The Pale Cebus.* B. M.

Fur nearly uniformly pale yellow fulvous; the cheeks, whiskers, and hair under the throat greyish; the crown, nape, and middle of the back darker; outside of legs redder; hair of the top of the head and nape elongate, directed backwards.

Cebus gracilis, *Gray, P. Z. S.* 1852, p. 107 ! not *Spix*, t. 5. C. unicolor, *Spix, Bras.* t. 4 ?

Hab. Brazil.

IV. *Crown with elongate, erect hairs, forming a single central more or less conical crest.*

12. **Cebus robustus.** *The Crested Cebus.* B. M.

Fur bright red; limbs and tail blackish; crown-spot black; crown like back.

Cebus robustus, *Pr. Max.; Kuhl, Beitr.* p. 35, 1820; *I. Geoff. Cat.* p. 43.

Var.? bleached? Uniformly pale yellow; crown and whiskers rather darker; sides of forehead whitish. B. M.

Simia flava, *Schreb.*

Hab. Brazil.

See *Cebus frontatus*, Kuhl, Beitr. p. 34. Grey; dull brownish grey above; circumference of the face white; the hair of the crown and forehead very close and long, elevated, forming a large black cap.

13. **Cebus annellatus.** *The Grizzled Sapajou.* B. M.

Fur brown, reddish-washed, especially on the thigh; hairs with several pale rings; hair of the crown short, reflexed, forming a long compressed central longitudinal crest; streak on sides of neck, bent down on the front of the shoulders, yellow; belly reddish; crown, temple, whiskers, arms and legs within and without, and tail black; face with deep-black hairs; crown-spot broad, with a broad line to the forehead and another on each side to the whiskers.

Cebus annellatus, *Gray, P. Z. S.* 1865, fig. ! ? Cebus capucinus, var., *I. Geoff. Cat.* p. 46.

Hab. South America.

V. *Hairs of crown radiating from a central spot, directed forward in front, and forming a transverse crest on the middle of the crown.*

14. **Cebus chrysopus.** *The Golden-handed Sapajou.* B. M.

The face, throat, chest, and front of shoulders pale grey brown; back of head and eyebrows darker, blackish; fur pale sooty

brown, washed with golden; the outside of limbs golden fulvous; hair soft.

? C. unicolor, *Spix, Bras.* t. 4 ? Cebus chrysopes, *F. Cuv. Mamm. Lith.* t. C. chrysopus, *Fischer.*

Hab. Brazil? Columbia.

15. **Cebus subcristatus.** *The Bonnet-Sapajou.* B. M.

Fur blackish brown; outside of legs yellowish-washed; sides of face pale ashy; front of the shoulders and of the upper arms yellowish; toes and fingers elongate, very slender. Hair of the crown elongate, divided by a central line, and diverging to the eyebrows, forming an erect transverse crest behind them.

Cebus subcristatus, *Gray, P. Z. S.* 1865, fig. !

Var. Frontal crest not so distinct; toes shorter.

Hab. South America.

VI. *Hairs of the crown elongate, erect, diverging in all directions, forming a kind of cap.*

16. **Cebus capillatus.** *The Capped Cebus.* B. M.

The hairs of the crown elongate, diverging in all directions; fur rather elongate, brown, slightly washed with yellow, especially on the thighs; sides of the forehead greyer; sides of neck, outsides of the shoulders, and arms fulvous; crown and nape blackish.

Cebus capillatus, *Gray, P. Z. S.* 1865, fig. !

Hab. Brazil.

Tribe IV. CALLITRICHINA.

Grinders $\frac{6}{6}$, bluntly tubercular. Canines moderate. Cutting-teeth erect, in a regular series with the canines. Head rounded. Lower jaw dilated behind. Eyes moderate, diurnal. Nostrils far apart, lateral. Tail very long, lax, straight.

Callitrichina, *Gray, P. Z. S.* 1849.

6. CHRYSOTHRIX.

Fur soft, close, erect. Tail cylindrical, elongate, covered with short hair; end rather tufted, only slightly prehensile. Canines moderate. Eyes large. Ears large. Septum of nose very broad. Lower jaw narrow behind. Skull much elongated, very large behind. Septum of the orbit membranaceous. Spinous processes of the lumbar vertebræ trapezoid.

Chrysothrix, *Kaup; Wagner*, 1842; Saimiris, *Is. Geoff.* 184 ? Saguinus and Pithecosciurus, *Lesson.* Callithrix, sp., *Geoff.* Saimiri, *Cuvier; Pouchet.*

* *Head grizzled grey and blackish; hairs grey or yellow, with a black subterminal ring.*

1. **Chrysothrix sciureus.** *The Teetee.* B. M.

Fur grey, minutely punctated with black; back more or less golden-washed; outer side of forearm yellow; tail elongate, slender, black-tipped; face whitish; hairs of back orange, with short black tips.

Saimiri, *Buffon, H. N.* xv. t. 10. Simia sciurea, *Linn.* Lemur leucopus, *Herm.* Callithrix sciureus, *Kuhl.* Chrysothrix sciureus, *Wagner; Schreb.* v. t. 9.

Var. 1. Back grey-punctated. B. M.

Var. 2. Back washed with golden yellow. B. M.

Hab. Brazil.

2. **Chrysothrix ustus.** *The Short-tailed Teetee.* B. M.

Fur grey, minutely punctulated with black; back golden-washed; hairs of the back pale reddish yellow, with minute black tips; outer side of forearms like the rest of the body; tail short, thick, black-tipped; face whitish.

Var. 1. Outer side of the forearm golden.

Saimiris ustus, *I. Geoff. Ann. du Mus.* iv. t. ? Chrysothrix nigrovittatus, *Wagner; Schreb.* v. t. 11.

Var. 2. Outer side of the forearm coloured like the rest of the body. B. M.

Hab. Brazil.

Dr. Dahlbom gives as the characters of this species, from the Paris specimen, that the ears are nearly bald, or only slightly hairy. Our specimen with the grey fore legs has the ears hairy, just like the specimen of *C. sciureus*. If it were not for the shortness of the tail, I should consider this to be only a large variety of *C. sciureus*.

** *Head black; hairs yellow, with black tips.*

3. **Chrysothrix entomophagus.** *The Black-headed Teetee.* B. M.

Fur golden brown; hairs of back black, with long yellow tips; outer side of thighs and shoulders closely punctated with black; upper part, head, and tail black; face, throat, and inside of thighs yellowish grey; ears hairy; tail moderately long.

Callithrix entomophagus, *D'Orb. Voy. Amér. M.* t. 4. Saimiris entomophagus, *Is. Geoff.* Chrysothrix entomophagus, *Schreb.* v. t. 16.

Var. Upper part of the head yellowish, with more or less long black tips to the hairs, making the fur more or less deep black. B. M.

Hab. Bolivia, *Bridges.*

This and *C. ustus* are larger species than *C. sciureus*.

See also *Simia sciurea cassiquerensis*, Humboldt, Obs. Zool.; *Saimiris lunulatus*, Is. Geoff. Ann. du Mus. iv. p. 18, with a black lunule over each eye. Can this be a bad description for *S. entomophagus*?

7. CALLITHRIX.

Tail covered with short hairs. Canines moderate. Septum of the nose nearly as broad as the cutting-teeth. Ears large. Face and orbits moderate. Eyes moderate, looking forward. Hair of orbit normal. The spinous processes of the lumbar vertebræ acute, triangular, nearly incumbent. Diurnal, gregarious, lively, agile, living on fruit, insects, and birds' eggs.

Callithrix, sp., *Geoff.* Saguinus, *Less.*

I. The fur soft, with abundance of elongated stiffer hairs.
   a. The hands and feet red. No. 1.
   b. The hands white, feet black. Nos. 2, 3.
   c. The hands and feet grey. Nos. 4–6.
   d. The hands and feet black. Nos. 7–9.

II. The fur soft, curly, without any elongated stiffer hairs; the hands and feet whitish. Nos. 10, 11.

I. *Fur soft, with abundance of elongated stiffer hairs.*

a. *Hands dark red bay; hairs of tail grey, with broad subterminal black band.*

1. Callithrix cuprea. *The Red Teetee.* B. M.

Dark black-and-grey grizzled; cheeks, throat, hands, feet, legs, and underside of the body dark red bay; tail like back, but rather darker; hairs of tail dark grey, with broad subterminal black band; eyebrows black.

Callithrix cuprea, *Spix, Bras.* p. 23, t. 17 (not well coloured). Callithrix discolor, *I. Geoff. Cat.* p. 41; *Arch. du Mus.* v. p. 531, t. 28.

Var. Tail white at the end.—*Geoff.*

Hab. Brazil; Ega, *Bates.*

The figure given by Spix is very badly coloured, but the description agrees well with the specimens. Geoffroy's figure is from a specimen with the end of the tail white; his figure is as much brighter than the Museum specimen as Spix's is too sombre.

b. *The hands white; the feet black; tail black.*

2. Callithrix amictus. *The White-chested Teetee.* B. M.

Black, reddish-washed; hairs black at the base; chest with a pure-white spot; hands white; feet black; forehead and tail black; hairs of tail black to the base.

Simia amicta, *Humboldt, Obs. Zool.* i. p. 357. Callithrix amictus, *Geoffroy.* C. amicta, *Spix, Bras.* t. 13 (good). Saguinus viduus, var., *Lesson.*

Hab. Guiana, *Schomburgk.*

3. **Callithrix torquatus.** *The Collared Teetee.* B. M.

Dark-reddish black brown; hairs red below, with black tips; crown dark; narrow margin to face white; narrow collar round the neck reddish white; hands white; feet black; tail black, with the hair red at the lower part; forehead black.

Cebus torquatus, *Hoffmannsegg, Mag. Gesell. Berlin,* i. p. 86, 1807; Callithrix torquatus, *Geoff.* Saguinus viduus, *Lesson.*

Hab. Brazil.

c. *The hands and feet the colour of the back, grey; hairs of tail pale, with darker subterminal rings.*

4. **Callithrix donacophilus.** *The Reed Teetee.* B. M.

Fur pale grey or reddish-black grey; chest and belly grey, or reddish grey; tail pale; hairs of tail grey, with dark tips; hands and feet grey, like the back.

Callithrix donacophilus, *D'Orbigny, Voy. Amér. M. Mamm.* p. 10, t. 5.

Var. 1. Pale, whitish; hairs annulated with grey; hands and feet equally pale. B. M.

Var. 2. Fur darker; hairs annulated with black and grey; front of thighs reddish. B. M.

Var. 3. Fur darker, reddish-washed, especially on head and back; hair thicker, longer, softer; ears whitish; hands and feet blackish grey; belly and front of thighs reddish. B. M.

Hab. Bolivia, *Bridges* !

5. **Callithrix Moloch.** *The Orabassu.*

Fur dark grey, black-and-red grizzled; cheeks, chest, and belly red; hands and feet dark grey.

Cebus Moloch, *Hoffmanns. Gesell. Berlin,* 1807, i. p. 97 (Mus. Paris). Callithrix Moloch, *Geoff.*

Hab. Brazil.

6. **Callithrix ornatus.** *The Bright Orabassu.* B. M.

Black-and-grey grizzled; forehead and ears white; temples, cheeks, throat, underside of body, and inner side of legs bright-red chestnut; hands and feet grey; tail blackish, grey-washed; hairs of tail pale, with a broad subterminal ring.

Callithrix ornata, *Gray, Ann. & Mag. N. H.* 1866, xvii. p. 57. C. discolor, *Verreaux, MS.*, not *Geoff.*

Hab. New Granada, *Verreaux.*

d. *Hands and feet black; fur rigid, bristly.*

7. Callithrix personatus. *The Masked Teetee.* B. M.

The fur grey, black-grizzled; hairs long, blackish, with narrow grey rings; chest and beneath blackish ashy; forehead, cheeks, whiskers, hands, feet, and lower part of the legs black; tail blackish ashy, hair near the base reddish, of the lower half of the end one-coloured grey.

Callithrix personatus, *Geoff.* Pithecia melanops, *Vigors, Cat. Zool. Soc.* ! C. brunnea, *Natterer; Wagner.*

Var. 1. Like former, with dark fur and black hands and ears, but tail much redder at the base, with the hairs red chestnut nearly to the tip.

Var. 2. Ashy grey; eyebrows punctated with black; hair on the basal half of the tail redder; ears blackish.

Hab. Brazil, *Lord Stuart de Rothsay.*

Spix (Bras. t. 12) represents a species of a yellowish colour, with a black head, under this name; perhaps the plate is badly coloured.

8. Callithrix nigrifrons. *The Black-fronted Teetee.* B. M.

Fur bristly, grey, washed with black; forehead, ears, spot on each side of neck, hands and feet, and inside of the forearm and leg black; chin blackish; back of crown and nape whitish grey; tail reddish, hairs red to the base. Young similar.

Callithrix nigrifrons, *Spix, Bras.* t. (badly coloured).

Hab. Brazil, *Lord Stuart de Rothsay.*

The colouring of Spix's figure does not agree with the description; the distribution of the colours on the head of the figure agrees with the Museum specimen.

9. Callithrix castaneoventris. *The Red-bellied Teetee.* B. M.

Fur dark, blackish grey, minutely annulated with grey; outside of the limbs reddish-washed; forehead, hands, and feet black; whiskers, throat and chest, belly, and inside of the limbs dark-red chestnut; tail black, tip whitish-washed; hairs of tail black to the base.

Callithrix castaneoventris, *Gray, Ann. & Mag. N. H.* 1866 ! ? C. caligata, *Natterer; Wagner, Ann. N. Hist.* 1843.

Hab. Brazil.

See *Miriquouina*, Azara. *Simia Azaræ*, Humb. Zool. i. p. 359. *Pithecia miriquouina*, Kuhl, Beitr. Red beneath, with black hand. *Hab.* Paraguay.

II. *Fur soft, woolly, without any longer hairs; hands and feet black.*

10. **Callithrix melanochir.** *The Black-handed Teetee.*

Crown, throat, and inside of the limbs black and grey and black and testaceous mixed.

Var. 1. Fur less red.

Var. 2. Tail bright red.—*I. Geoff.*

Callithrix melanochir, *Pr. Max. Abbild.* iv. t. (type in Mus. Paris).

Hab. Brazil: Bahia.

11. **Callithrix gigo.** *The Grey Teetee.*

Crown nearly all black, slightly grey-dotted; sides of the face, gular band, and inside of the limbs black.

Callithrix gigo, *Spix, Bras.* p. 22, t. 16; *Is. Geoff.*

Var. ? Throat whitish.

Callithrix cinerascens, *Spix, Bras.* p. 20, t. 14.

Hab. Brazil.

Tribe V. NYCTIPITHECINA.

Grinders $\frac{6}{6}.\frac{6}{6}$. Cutting-teeth vertical, in a regular series with the canines. Lower jaw dilated behind. Eyes large, nocturnal. Nostrils small, close together, as in the old-world monkeys.

8. NYCTIPITHECUS.

Eyes very large, lateral; hair of the orbit radiating like the feathers of a nocturnal bird. Septum of nose narrow. Ears large. Claws small, weak. Spinous processes of the lumbar vertebræ acutely triangular, incumbent.

Aotus, *Humboldt.* Aotes, *Jardine* (misprint). Nocthora, *F. Cuvier.* Nyctipithecus, *Spix, Bras.* 1823. Chirogaleus, species, *Vigors and Horsfield.*

Nocturnal, with the habits of the *Iacchus*, living on insects and birds. The ears of Humboldt's specimen seem to have been imperfect, which induced him to call it *Aotus*.

I. Head with three streaks; tail cylindrical.

a. Frontal spot elongate, yellowish; head-streaks linear, elongate; fur short. No. 1.

b. Frontal spot short, white; head-streaks short; central rhombic. No. 2.

II. Head with a round pale spot over each eye; no head-streaks; fur long; tail bushy.

* *Tail cylindrical, hair short.*

1. **Nyctipithecus trivirgatus.** *The Douroucouli.* B. M.

The black streaks on the crown distinct, linear; frontal spot elongate, yellowish; fur short; throat and inside of limbs greyish ashy; chest and belly ferruginous; tail slender, cylindrical, blackish brown, yellowish brown at the under part at the base.

Simia trivirgata, *Humboldt.* Nyctipithecus trivirgatus, *Gray, Ann. and Mag. N. H.* x. p. 256, 1842! N. Humboldtii, *Schinz.* N. Oseryi, *I. Geoff. Cat.* p. 2; *Castelnau, Expéd. Amér. Sud,* t. 2. f. 1. N. vociferans, *Spix, Bras.* t. 2, 1823.

Hab. Peru.

2. **Nyctipithecus Commersonii.** *The Vitoc.* B. M.

Black facial streaks irregular and rather confused; side ones linear; the middle one broad, lozenge-shaped; frontal spots short, white; fur rather long, thick; neck, chest, belly, and inner part of base of limbs and tail fulvous; tail cylindrical.

Nyctipithecus felinus, *Spix, Bras.* t. 18 (good), 1823; *Is. Geoff. Cat.*; *Gray, Ann. & Mag. N. H.* 1842, x. p. 256! Chirogaleus Commersonii, *Vigors and Horsfield, Zool. Journ.* iv. p. 112, 1829! Callithrix infulatus, *Licht.; Kuhl.* Nocthora trivirgata, *F. Cuv. Mamm. Lith.* t.

Hab. Brazil.

** *Tail depressed, broad; hair of tail spreading on the sides like a squirrel.*

3. **Nyctipithecus lemurinus.** *The Broad-tailed Vitoc.* B.M.

Head with a rounded white spot over each eye; frontal streaks indistinct; fur of body and tail elongate; tail bushy.

Nyctipithecus hirsutus, *Gray, List Mamm. B. M.* 1842! N. lemurinus, *Is. Geoff. Mém. Ac. R. de l'Institut,* 1843, p. 178; *Voy. Venus, Mamm.* t. 3. f. 2. N. felinus, var., *Gray, List Mamm. B. M.* 1842!

Hab. Columbia; Santa Fé de Bogotá.

Tribe VI. PITHECINA.

Grinders $\frac{6}{6}.\frac{6}{6}$. Lower cutting-teeth large, shelving forward, converging, separated from the canines by a space. Lower jaw not dilated behind. Fur harsh, elongate. Claws bent. Nostrils far apart.

9. PITHECIA.

Chin with a broad beard. Crown with a radiated divided wig. Head and neck short. Tail long, covered with long hair. Canines strong. Septum of the nose broader than the cutting-teeth. Ears moderate. Gregarious, slow, sad, voracious, vociferous.

Pithecia, *Desm.* Brachyurus, *Spix.* Yarkea, *Lesson.*

See Monog., Gray, Proc. Zool. Soc. 1860, p. 228; and Anat., Flower, P. Z. S. 1862, p. 326.

I. Forehead and crown with a central black streak; hair one-coloured. *Pithecia.* No. 1.

II. Forehead and crown covered with hair, without any central streak. *Yarkea.*

a. Hairs white-tipped. Nos. 2, 3.

b. Hairs with a subterminal ring. No. 4.

* *Hair one-coloured.* Pithecia.

1. Pithecia leucocephala. *The Black Yarkee.*

Forehead with a central black streak, of *male* (?) yellow, of *female* (?) white.

♀ Simia leucocephala, *Audeb. Sing.* vii. f. 2. Pithecia leucocephala, *Geoff.*; *Gray, Zool. Sulphur*, p. 12, t. 2 (head)! Simia pithecia, *Schreb.* t. 32. Pithecia ochrocephala, *Kuhl, Beitr.* p. 46. ♂ P. chrysocephala, *I. Geoff. Cat. Mamm.* p. 53; *Archiv. du Mus.* v. p. 587, t. 29; *Gray, P. Z. S*, 1860, p. 230! P. inusta, *Spix, Bras.* p. 15, t. 13? Saki, *Buffon, H. N.* xv. t. 12.

Hab. Brazil.

The forehead is yellow when fresh, and white when faded by exposure. M. Geoffroy thinks the colour depends on the size of the specimen.

** *Hair harsh, white tipped.*

2. Pithecia monachus. *The Yarkee.* B. M.

Black, grey-washed; hairs very long, harsh, white-tipped; forehead and crown of *male* yellow, of *female* white.

Yarque, *Buffon, Suppl.* vii. t. 30 (bad). Simia monachus, *Humb.* Pithecia monachus, *Geoff. Ann. du Mus.* xix.; *Gray, P. Z. S.* 1860, p. 230; *Flower, P. Z. S.* 1862, t. 37! *Is. Geoff.*; *Castelnau, Expéd. Amér. Sud*, t. 3. P. hirsuta, *Spix, Bras.* t. P. quapa, *Poeppig.* P. nocturna, var., *Lesson.* P. irrorata, *Gray, Zool. Sulph.* p. 14, t. 3 (forehead bald)! *Ann. & Mag. N. H.* 1842, x. p. 256!

Hab. Brazil.

The specimen described by M. Geoffroy was young and in a very bad state; the one in the British Museum, figured in the 'Voyage of the Sulphur,' t., has the face quite bald. This is now shown to be accidental, as the others, more lately received, have white hairs on the face.

3. Pithecia albicans. *The Whitish Yarkee.* B. M.

Yellowish white; tail and large patch on the back black, slightly washed with white; hairs with short white tips. Male, female, and young alike.

Pithecia albicans, *Gray, P. Z. S.* 1860, p. 231, t. 81 (not good) !

Hab. Brazil: Upper Amazons and Lake Tefle, *Bates.*

*** *Hairs annulated.*

4. **Pithecia rufiventer.** *The Whiskered Yarkee.* B. M.

Greyish black, pale-washed; hairs rather soft, with a subterminal yellowish ring; forehead, like back, with moderately elongated hairs; moustache yellow; belly red.

Young. Moustache white, beneath grey.

Sagouin, *Buffon, Supp.* vii. t. 31. Simia pithecia, *Linn.* Fox-tailed Monkey, *Mus. Lever.* t. 4. ? Pithecia rufiventer, *Geoff.*; *Kuhl.* P. rufibarba, *Kuhl.* P. nocturna, *Lesson.* P. capillamentosa, *Spix, Bras.* t. 11. P. pogonias, *Gray, Zool. Sulph.* p. 13, t. 2 ! *Ann. & Mag. N. H.* 1842, x. p. 256 !

Hab. Brazil.

The young specimen in the Paris Museum on which *P. rufiventer* was described appears to be this species, but the belly is scarcely red.

Tribe VII. BRACHYURINA.

Grinders $\frac{6}{6}.\frac{6}{6}$. Lower cutting-teeth long, shelving, converging, separated from the canines by a space. Lower jaw dilated behind. Fur soft, silky. Claws blunt. Nostrils far apart.

10. CHIROPOTES.

Fur soft, short; tail as long as the body, and thick, club-shaped. Crown with hair like a wig, divided by a central longitudinal line. Chin large, bearded on each side. The lower cutting-teeth rather shelving. Limbs short, strong.

Chiropotes, *Lesson.* Cacajao, *Lesson.* Brachyurus, *Spix*; *Gray, P. Z. S.* 1849, p. 9. Pithecia, sp., *Is. Geoff.*

The hair of the head is directed forward, radiating from a central point, in the young; but it forms a large convex wig on each side of the crown, divided by a central line, in the adult.

M. I. Geoffroy describes the animal as having the tail "notably shorter than the body." In all the Museum specimens the tail is as long or longer.

1. **Chiropotes sagulata.** *The Yellow-backed Cuxio.* B. M.

Black; back and shoulders yellow; hairs of back black at the base; tail very thick; beard very large.

Simia chiropotes, *Humboldt, Obs.* Pithecia chiropotes, *Geoff. Ann. Mus.* xix. p. 116. Simia sagulata, *Traill, Wern. Soc.* iii. p. 167, t. ! Brachyurus Satanas, *Gray, List Mamm. B. M.* 13 !

Hab. Guiana; Orinoco; Demerara.

2. **Chiropotes Satanas.** *The Brown Cuxio.* B. M.

Fur ashy brown; face, crown, the beard, limbs, and tail densely hairy, hairs elongate; chin-beard moderate.

Cebus Satanas, *Hoffm. Mag. Berl.* i. p. 93, 1807. Brachyurus Israëlita, *Spix, Bras.* t. 76. Chiropotes couxio, *Lesson.*

Hab. Brazil.

In the Paris Museum, the male has the back brown and the wig black; the female, back and wig fulvous; young, nearly uniform brown, and the wig slightly developed.

3. **Chiropotes ater.** *The Black Cuxio.* B. M.

Fur black, shining; hairs of eyebrows projecting. *Young.* Black, with very short pale tips to some of the hairs on the back; the hair of the crown radiating from the centre and projecting forwards; beard rudimentary; tail slender, as long as the body and head.

Hab. Brazil?

4. **Chiropotes albinasa.** *The White-nosed Cuxio.*

Fur of body and head deep black, pale-washed; nose white.

Pithecia albinasa, *I. Geoff. Comp. Rend.* 1848, xxviii. p. 298; *Arch. du Mus.* x. p. 559; *Castelnau, Expéd. Amér. Sud,* t. 2. f. 2 (young).

Hab. Brazil. Mus. Paris; a single young specimen.

11. OUAKARIA.

Fur short, silky. Face short, subcylindrical. The crown and forehead with short hairs directed forwards. The chin scarcely bearded. Legs elongate. Lower jaw dilated behind. The lower cutting-teeth very much shelving.

Brachyurus, *I. Geoff.* Brachyurus, sp., *Spix.* Cacajao, *Lesson.* Ouakaria, *Gray, P. Z. S.* 1859, p. 10.

The converging, slender, shelving lower cutting-teeth, the slender limbs, and short tail show an affinity with *Indris* (in *Lemuridæ*).

M. I. Geoffroy describes the tail of *Brachyurus calvus* and *B. rubicundus* as very short, bushy, about a centimetre long. There are four specimens in the British Museum which agree with the description of *B. calvus*; but three of them have the tail about the same length and form as in *O. melanocephala*—that is, about one-third the length of the body; and that of the other is short; but then it appears to have been cut or broken off. The vertebra of the tail of the small white specimen is 6 inches long, so that the length of the tail in the stuffed specimen does not depend on the stuffing.

* *Fur black, yellow- and red-varied.*

1. **Ouakaria melanocephala.** B. M.

Black; back and sides of body yellow; loins, outside of thigh, and end of tail red chestnut.

Simia melanocephala, *Humboldt, Obs. Zool.* t. 29 (not good). Pithecia melanocephala, *Geoff.* Brachyurus ouakaria, *Spix, Bras.* t. 8 (good). Ouakaria Spixii, *Gray, P. Z. S.* 1849, p. 10, fig. !

Hab. Brazil.

** *Fur whitish or reddish.* Albino of the former.

2. **Ouakaria rubicunda.** *The Red Acari.*

Fur of the body and limbs bright red, of neck fulvous yellow, of nape pale yellow.

Brachyurus rubicundus, *Is. Geoff. Cat. Mamm.* p. 57, 1851; *Arch. du Mus.* v. p. 965, t. 30; *Castelnau, Expéd. Amér. Sud*, t. 4. f. 2 (tail too short).

Hab. Brazil.

3. **Ouakaria calva.** *The White Acari.* B. M.

Throat deep golden red. Fur fulvous, whitish on the back, and yellow or golden below and on inner surface of limbs; tips of the hairs of the crown black, and of some of the hairs of the back grey.

Female. Beard elongate, red and black.

Var. Back with some reddish hairs.

Brachyurus calvus, *Is. Geoff. Cat. Mamm.* p. 57; *Arch. du Mus.* v. p. 560; *Castelnau, Expéd. Amér. Sud*, t. 461 (tail too short). Ouakaria calvus, *Gray, P. Z. S.* 1849, p. 10, fig. (skull)!

Hab. Brazil: Para.

Tribe VIII. HAPALINA.

Grinders $\frac{5}{5}.\frac{5}{5}$ (as in old-world monkeys). Lower cutting-teeth vertical, in a regular series. Lower jaw not dilated behind. Nostrils far apart, lateral.

* *Lower cutting-teeth elongate, slender, linear, of the same size as the canines.*

12. HAPALE.

Conch of ears rather large, exposed, bald externally, with cross band of elongated hairs on the inner surface of the conch, forming an elongated pencil. Tail annulated. Back punctated, rarely indistinctly banded. Lower cutting-teeth elongate, slender, linear, as high as the canines.

Jacchus hapale, *Gray, P. Z. S.* 1866.

Hapale aurita. *The White-eared Marmoset.* B. M.

Blackish; minutely punctulated with yellow or reddish; sides of head, limbs, and hinder part black; crown brown; face large; spot on forehead and short ear-tufts grey.

Jacchus auritus, *Geoff. Ann. Mus.*; *Gray, P. Z. S.* 1866 !

Var. 1. Back blackish, without any indication of cross band.

Var. 2. Back red; punctulated with narrow, faint, paler cross bands, especially on the loins.

Hab. Brazil.

See

a. *Jacchus humeralifer*, Geoff. Face, shoulders, chest, arms, and ear-tufts white; thighs brown-and-white grizzled. *Hab.* Brazil.

b. *Hapale chrysoleucos*, Natterer; A. Wagner, Ann. Nat. Hist. No. 74, 1843; Wiegm. Archiv, viii. *H.* albida, manibus caudaque splendide rutilo-fulvis, auriculis albo penicillatis. Altitudo 9″, long. caudæ 12½″. Bahia. Mus. Vienna.

13. JACCHUS.

Conch of ears large, bald, with a tuft of elongated hairs, forming an expanded tuft on the front edge of the ear opening. Hair of sides of crown elongate. Tail annulated with black. Back cross banded. Lower cutting-teeth elongate, slender, cylindrical, as long as canines.

Jacchus, *Gray, P. Z. S.* 1866.

Jacchus vulgaris. *The Black-eared Marmoset.* B. M.

Blackish; back and outside of the thighs with grey cross bands; head with white spot on upper part of nose.

Simia Jacchus, *Linn.* Ouistiti, *Buffon, H. N.* xv. p. 96, t. 14. Hapale Jacchus, *Illiger; Gray, P. Z. S.* 1842 !

Var. 1. Ear-tufts white, head black.

Jacchus vulgaris, *Geoff. Ann. du Mus.*

Var. 2. Ear-tufts white, hinder part of head and back of neck grey.

Jacchus albicollis, *Spix, Bras.* p. 33, t. 25.

Var. 3. Ear-tufts black, head and neck black.

Jacchus penicillatus, *Geoff.; Spix, Bras.* t. 26.

Var. 4. Ear-tufts black, head and neck blackish, face, temples, and forehead whitish.

Jacchus leucocephalus, *Geoff.*

Var. 5. Like *var.* 4; but face, cheeks, and throat paler grey brown.

Jacchus leucogenys, *Gray, List Mamm. B. M.*

Var. 6. Head and neck black, like *var.* 3; but no white spot on the nose. Young without any ear-tufts.

The young animals are nearly black, without any pencil to the ears, and with the tail ringed. The young *J. penicillatus* has no white spot on the nose.

See *Jacchus chrysopygus*, Natterer; Mikan, Del. Flor. et Faun. t. Black; rump and inner side of thighs golden; forehead lurid yellow; mane descending below the humerus. *Hab.* Brazil.

14. CEBUELLA.

Ears small, short, slightly hairy externally, hid in the elongated reversed hair of the crown; no ear-tufts. Tail darker-ringed. Back punctulated. Lower cutting-teeth elongate, cylindrical, as long as the canines.

Jacchus, § Cebuella, *Gray, P. Z. S.* 1866.

Cebuella pygmæa. B. M.

Fur ferruginous yellow, black- and red-varied; neck, chest, belly, and inside of the limbs yellowish; hands and feet yellow brown.

Hapale pygmæa, *Spix, Bras.* p. 32, t. 24. f. 2; *Is. Geoff.; Castelnau, Expéd. Amér. Sud*, t. 5. f. 1, 2. H. (Cebuella) pygmæa, *Gray, P. Z. S.* 1866.

Hab. Brazil.

15. MICO.

Ears large, exposed, naked externally, and internally without any pencil of hairs. Tail black, not annulated. Lower cutting-teeth elongate, slender, cylindrical, as long as the canines.

Mico (part.), *Lesson.* Jacchus, § Mico, *Gray, P. Z. S.* 1866.

Mico melanurus. B. M.

Fur ashy brown; head and limbs dark brown; front of body paler; front of thighs and band across loins whitish; tail black.

Jacchus melanurus, *Geoff.* J. leucomeros, *Gray, Ann. & Mag. N. H.* 1846! J. (Mico) melanurus, *Gray, P. Z. S.* 1866! Hapale melanura, *Wagner, Schreb.* v. p. 15.

Albino. Body, head, and limbs white; tail black. B. M.

Mico, *Buffon, H. N.* Simia argentata, *Linn.* Jacchus argentatus, *Geoff.* Fair Monkey, *Pennant.* Cebus canus, *Blainv. Ostéogr.*

Hab. Brazil; Bolivia, *Bridges.*

** *Lower cutting-teeth short, truncated; lower canines conical, exserted.*

16. LEONTOPITHECUS.

Head covered with elongate hairs, those round the face bent back-

ward. Face rather naked. Ears bald, partly hidden. Tail not ringed. Lower cutting-teeth short, truncated. Canines conical.

Leontopithecus, *Lesson.*

1. **Leontopithecus Rosalia.** *The Marikina.* B. M.

Golden yellow more or less red.

Marikina, *Buffon, H. N.* xv. 108, t. 16. Simia Rosalia, *Linn.* Midas Rosalia, *Geoff.*

Var. Head, feet, hands, and end of tail blackish.

Hab. Brazil.

2. **Leontopithecus chrysomelas.** B. M.

Black ; circumference of face, forearms, hands, and base of tail fulvous.

Midas chrysomelas, *Kuhl.* Hapale chrysomelas, *Pr. Max. Abbild.* p. 11, t.

Hab. Brazil.

Very like a melanism of *L. Rosalia* ; but the hands and feet, which are sometimes blackish in that species, are yellow—that is to say, not changed.

17. ŒDIPUS.

Face and sides of the head rather naked. Crown with a patch of hair, which is often elongated. Tail not ringed. Hair of neck elongated. Lower cutting-teeth short, truncated. Canines conical.

Œdipus, *Lesson.*

a. Hair on crown forming a large erect crest. No. 1.
b. Hair on crown short, bent back. No. 2.

* *Hair on crown elongated, erect, forming a large tuft.*

1. **Œdipus titi.** *The Pinche.* B. M.

Grey brown; outside of limbs, and base of tail, washed with rufous ; tuft on crown, throat, chest, belly, fore limbs, and front edge of hind limbs white ; end of tail black.

Pinche, *Buffon, H. N.* xii. t. 17. Simia Œdipus, *Linn.* Midas Œdipus, *Geoff.* Œdipus titi, *Lesson.*

Hab. Brazil.

** *Hair on crown short, forming a narrow oblong patch.* Hapanella.

2. **Œdipus Geoffroyi.** B. M.

Grey brown ; hair soft, blackish at the base ; nape, back of the

neck, and base of tail chestnut; crest, throat, chest, fore legs, and front of hind legs white; end of tail black.

Midas Œdipus, var., *Spix, Bras.* t. 23, 1823. Hapale Geoffroyi, *Pucheran, Rev. Zool.* 1845, p. 336. Midas Geoffroyi, *I. Geoff. Cat.* p. 63.

Hab. Panama, *Salvin.*

18. MIDAS.

Face and forehead hairy. The hair of the head like that of the body. The ears large, naked, without any tuft. The lower cutting-teeth short, truncated; canines conical. Tail black, not ringed.

Midas, *Geoff.*

a. Lower lip white. Nos. 1, 2, 3.
b. Nose black, whiskers white. No. 4.
c. Nose black; face brownish, with some grey hairs. No. 5.
d. Nose and lips black. No. 6.

* *Lower lip white.* Mystax.

1. Midas mystax. B. M.

Black; back and thigh brownish-washed; beneath dull black; nose and upper and lower lip with a broad tuft of long white hairs.

Midas mystax, *Spix, Bras.* p. 29, t. 32; *Geoff. Cat.* p. 64.

Hab. Peru; Upper Amazons.

See *Midas pileatus*, I. Geoff. Cat. p. 63; Arch. du Mus. v. t. 31. Brown, reddish-washed; limbs and tail black; crown bright red; nose and lips white. *Hab.* Brazil.

2. Midas labiatus. *The Red-bellied Midas.* B. M.

Black; the hinder part of the back washed with grey; hinder part of the chest, belly and inside of the limbs, and underside of the base of the tail rufous; tip of nose and edges of the upper and lower lip white.

Midas labiatus, *Geoff.*

Hab. Brazil: north side of the Amazons, *Bates.*

3. Midas rufiventer. *The Crowned Midas.* B. M.

Black; hinder part of the back washed with ashy grey; the chest, belly, inside of the limbs, and the underside of the base of the tail bright dark rufous; tip of the nose and the edges of the upper and lower lip white; crown of the head with a rufous spot, and the nape grey.

Midas rufiventer, *Gray, Ann. & Mag. N. H.* xii. p. 398! *Gray, P. Z. S.* 1866; *Zool. Sulph.* t.! M. elegantulus, *Slack, Proc. Acad. N. S. Philad.* 1861, p. 463.

Hab. Brazil.

** *Nose black; whiskers white, broad.*

4. **Midas leucogenys.** *White-cheeked Midas.* B. M.

Black; back, and outside of hind limbs, washed with reddish grey; face black, with a large triangular white spot under each cheek.

M. leucogenys, *Gray, P. Z. S.* 1866!

Hab. Brazil.

See *M. nigricollis*, Spix, Bras. t. 21; but it is difficult to determine if the nose is white or black in the figures. In the description the lips are said to be white.

*** *Nose black; face brownish, with some grey hairs.*

5. **Midas flavifrons.** *The Brown-headed Midas.* B. M.

Black; hinder part of back rather mottled with white; head pale brown, black-varied.

Midas flavifrons, *Is. Geoff. Cat.* p. 64, 1848; *Castelnau, Mamm. Expéd. Amér. Sud*, t. 6. f. 1.

Male. Outside of limbs bright-rufous-washed; underside of body and inside of limbs red brown.

Female. Outside of limbs and underpart of body blackish.

Hab. Brazil, *Bates*.

See also—

a. *Midas rufoniger*, I. Geoff. Cat. p. 64, 1848; Castelnau, Expéd. Amér. Sud, t. 5. f. 3. Back, loins, thighs and legs bright-red chestnut. *Hab.* Brazil. Mus. Paris.

b. *Midas Devillii*, Is. Geoff. Cat. p. 64; Castelnau, Expéd. Amér. Sud, t. 6. f. 2. Loins, thighs, and legs bright-red chestnut; back black, annulated with grey; head, neck, and front part of the back and fore limbs, and four hands and tail black. *Hab.* Peru. Mus. Paris.

c. *Midas nigrifrons*, I. Geoff. Cat. p. 64. Forehead and circumference of face black; crown of the head, the throat, neck, and front limbs brown, finely punctated with red (hairs annulated at the tips with these colours). Back black- and yellow-ringed; croup and hinder limbs red-punctated; lower part of body and insides of limbs reddish brown; hands and tail black.

d. *Midas Illigeri*, Pucheran, Mag. Zool. 1845, p. 336. Head black; back and loins black- and fulvous-banded; the rest of the body red; tail and hands black. *Hab.* Columbia?

e. *Midas fuscicollis*, Spix, Bras. t. 1. *M. Weddellii*, Deville, Rev. Zool. 1849, p. 55; Is. Geoff. Cat. p. 65. Loins, thighs, and

legs bright-red chestnut; circumference of face and forehead white. *Hab.* Bolivia.

**** *Nose and lips black.* Tamarin.

6. **Midas ursulus.** *The Tamarin.* B. M.

Black; hinder part of the back rather mottled with greyish white.

Var. 1. Hands black. B. M.

Tamarin nègre, *Buffon, Supp.* vii. t. 32. Midas ursulus, *Geoff.* Jacchus tamarin, *Gray* !

Var. 2. Hands yellow or orange. B. M.

Tamarin, *Buffon, H. N.* xv. p. 92, t. 13. Simia Midas, *Linn.* Midas rufimanus, *Geoff.* S. Lacepedii, *Fischer, Bull. Soc. Moscou*, 1806, p. 23. M. Lacepedii, *Slack, Proc. Acad. N. S. Phil.* 1861, p. 461.

Hab. Brazil.

19. SENIOCEBUS.

Head naked in front; hinder part of head covered with short hairs. Ears bald, exposed. Tail not ringed. Lower cutting-teeth short, truncated. Canines conical.

Œdipus, part., *Lesson.*

Seniocebus bicolor. B. M.

Grey, brown-punctulated; back of head, neck, chest, and fore legs white; tail black above, brownish beneath and at the tip.

Young. Face rather hairy; forehead naked.

Midas bicolor, *Spix, Bras.* p. 31, t. 24. f. 1. Œdipus titi, junior, *Lesson.* Hapale bicolor, *Wagner*; *Schreb.* v. t. 12.

Hab. Brazil.

Fam. IV. LEMURIDÆ.

Cutting-teeth $\frac{2}{4}$ or $\frac{4}{6}$, dissimilar; upper small, separate in pairs, vertical; lower larger, contiguous, shelving forward; the two outer larger, opposed to the space between the upper cutting-teeth and the canines (they are probably the lower canines). The fingers and toes free, well developed; the first toe shorter. Claw of the second toe subulate; of the first elongate, curved; the others flat. *Hab.* Old continent: Africa, Madagascar, or India. Nocturnal; sleeping in the day, rolled into a ball, with the tail between the hind legs and convolute round the body.

Lemuridæ, *Gray, P. Z. S.* 1863, p. 131.

Synopsis of Tribes and Genera.

Section A. *Legs elongate. Tail long (except in* Indris).

A. *Teeth* 36; *lower cutting-teeth* 6; *grinders* $\frac{6}{6}\cdot\frac{6}{6}$.

Tribe I. Lemurina. *The ears moderate, hairy, more or less hid in the fur. Feet shorter than the tarsus.*

* *Head elongate; muzzle elongate.*

1. Varecia. The head surrounded by a ruff. Ears tufted.
2. Lemur. Head without any ruff. Wrist with a narrow bald line and pad above.
3. Prosimia. Head without any ruff. Ears externally hairy. Wrist hairy.

** *Head roundish; muzzle short.*

4. Hapalemur. Upper cutting-teeth on the inside of canines.
5. Cheirogaleus. Upper cutting-teeth in a regular arched series.

Tribe II. Galagonina. *The ears elongate, bald, contractile on the hinder edge, folding back on the head. Feet short and broad, about two-thirds the length of the shank or shin.*

* *Head elongate; face produced.*

6. Otogale. Tail bushy. Upper cutting-teeth nearly in the same line.

** *Head roundish; face short.*

7. Galago. Tail bushy with long hairs. Upper cutting-teeth equal, slender.
8. Lepilemur. Tail with close-set short hair. Upper cutting-teeth in an arched series, two middle larger.

B. *Teeth* 34; *lower cutting-teeth* 4; *grinders* $\frac{5}{5}\cdot\frac{5}{5}$. *Feet short, broad.*

Tribe III. Microrhynchina. *Head round; face flat. Ears small, hidden.*

9. Microrhynchus.

Tribe IV. Indrisina. *Head elongate; face rather produced. Ears prominent, hairy.*

10. Propithecus. Tail elongate.
11. Indris. Tail none.

Section B. *Arms and legs equal. Tail none. Feet short.*

Tribe V. Lorisina. *The hands normal; fingers free, index clawed.*

12. Nycticebus. Limbs short.
13. Loris. Limbs elongate, slender.

Tribe VI. Perodicticina. *Hands broad, short; index finger abortive, clawless.*

14. Perodicticus. Hands and feet large. Nape spinous.
15. Arctocebus. Hands and feet small. Nape unarmed.

Section A. *The legs much longer than the arms. Fingers free, well developed. Tail elongate, hairy, except in* Indris.

Tribe I. LEMURINA.

Head elongate; face more or less produced. Ears moderate, hairy externally, more or less hid in the fur. Feet shorter than the tarsus. Upper cutting-teeth subequal, on the side of the more or less prominent intermaxillary bone. Tail elongate, hairy. The great toe short, broad. The length of the feet is shown in the skeleton by the tarsal bones being shorter, or not longer, than the metatarsal ones; they are shorter than the shank or tibia, being generally about two-thirds the length of that part of the leg.

Lemurina, *Gray, Ann. Phil.* 1825; *P. Z. S.* 1863, p. 133.

A. *Head elongate; muzzle elongate. Ears exposed.*

1. VARECIA.

The cheek and chin surrounded by a fringe of long hair. The ears pencilled at the end. The wrist hairy. The skull elongate. Face tapering, broad behind, and shelving on the sides of the nose; superciliary ridges prominent, much higher than the forehead.

Varecia, *Gray, P. Z. S.* 1863, p. 135.

1. Varecia varia. *The Ruffed Maucaco.* B. M.

Fur black-and-white varied, rarely all black or all white.

Ruffed Maucaco, *Penn. Syn.* p. 118. Lemur melanoleucus, *Gray.* L. macaco, *Gmelin; Linn. S. N.; Geoff. Ann. Mus.* xix. p. 215; *F. Cuv. Mamm. Lith.* t. L. mocaco, *Geoff.* Vari, *Buffon, H. N.* xiii. t. 27 ♂; *Schreb.* t. 40 B; *Audeb. Makis*, t. 61. f. 5. Prosimia macaco, *Gray; Lesson, Spec.* i. p. 233. Varecia varia, *Gray, P. Z. S.* 1863, p. 136!

Var. 1. Side of the nose, mouth, ears, back of neck, back, and sides white; forehead, belly, outer side of limbs, and tail black.—*Buffon, H. N.* t. xiii. t. 29.

Var. 2. Black; colour on the cheek and neck, the limbs, and an indistinct band round the body white.

Le Vari à ceinture, *Geoff. Rev. Ency.* t.; *Audeb. Makis*, t. 17. f. 6; *F. Cuv. Mamm. Lith.* t. Prosimia subcincta, *A. Smith.*

Var. 3. Grey white; muzzle, top of the head, shoulders, arms, inner side of thighs, tail, and four hands deep black or brown.—*Audeb.* t. 16. f. 5.

Var. 4. White.

Var. 5. White, with a brown spot on the forehead, a larger one on each side.

Var. 6. Black. B. M.

The Black Macaco, *Edw. Glean.* v. t. 217. Lemur niger, *Geoff. Ann. Mus.* xix. p. 159. L. macaco, *Linn.* Varecia nigra, *Gray, P. Z. S.* 1863, p. 136 !

Hab. Madagascar.

Skull with the face much lengthened, tapering. The nose high, shelving on the side to the central ridges. The grinders large ; the upper cutting-teeth one before the other, on the side of the projecting intermaxillary. The interorbital space very narrow and depressed. Length of skull 3″ 9‴, breadth at zygomatic arch 2″.

Fig. 1.

Varecia varia.

2. **Varecia rubra.** *The Red Maucaco.* B.M.

Fur red ; wrist or ankles more or less white.

Lemur ruber, *Geoff.* 1812. Prosimia rubra, *A. Smith.* P. erythromela, *Lesson.* Varecia rubra, *Gray, P. Z. S.* 1863, p. 136 !

Hab. Madagascar.

Skull wider, orbit more diverging, and the side of the nose higher and flatter than in *V. varia.*

3. Varecia leucomystax.

Grey; patch on lower part of back and fringe round the face white.

Lemur leucomystax, *Bartlett, P. Z. S.* 1862, p. 347, pl. 41. Varecia leucomystax, *Gray, P. Z. S.* 1863, p. 136 !

Hab. Madagascar. Living in the Zoological Gardens.

2. LEMUR.

Face without any ruff. Ears hairy externally. The hand with a bald line up the inside of the wrist, ending in a bald spot above. The tail ringed. A dark gland on the middle of the rump. Upper cutting-teeth subequal, rather shelving. Skull with the forehead convex; face rather compressed, round above.

Lemur, *Linn.*; *Gray, P. Z. S.* 1863, p. 136. Procebus, *Storr.* Prosimia, part., *Brisson.*

Lemur catta. *The Ring-tailed Lemur.* B. M.

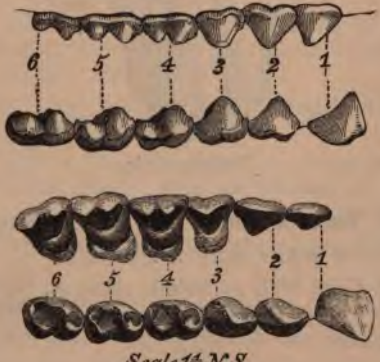
Ashy; sides of back brownish; chest and belly, sides of face, ears, and frontal spot white; orbit and end of muzzle blackish; limbs greyer.

Ring-tailed Maucaco, *Penn. Syn.* Lemur catta, *Linn. S. N.* i. p. 45; *Geoff. Ann. du Mus.* xix. t. 62; *Gray* ! Maucaco, *Edw. Birds*, iv. t. 197; *Schreb.* t. 41; *Shaw, Mus. Lever.* t. 11. Mocaco, *Buffon, H. N.* xiii. t. 22; *Mém. Mus.* t.; *Audeb. Makis*, t. 14. f. 4; *F. Cuv. Mamm. Lith.* t. Prosimia catta, *Lesson, Sp. M.* p. 223. Procebus cinerea, *Brisson*, p. 157.

Hab. Madagascar.

Skull quite adult, length 3″ 2‴, breadth 1″ 10‴; the interorbital space flattened, narrow; forehead convex.

Fig. 2.



Scale 1/2 N.S.

Lemur catta. (Huxley.)

3. PROSIMIA.

The head without any ruff or fringe. The ears hairy externally, naked at the tip, more or less exposed. The wrist hairy. The skull elongate; the face produced, rather compressed on the sides, rounded above; forehead flat.

Prosimia, *Brisson*; *Gray*, *P. Z. S.* 1863, p. 137.

a. Temple, cheek, forehead, and crown white. No. 1.
b. Temple, under the ear, and throat white. No. 2.
c. Temple coloured like the back. Nos. 3, 4.
d. Temple rufous, the hair elongate beneath. Nos. 5, 6.
e. Temple and cheek rufous. Nos. 7, 8, 9, 10.

Prosimia rufifrons is easily known by the two small white stripes across each side of the rump; *P. albifrons* by the white back of the head; *P. melanocephala* by the black head and yellowish fur; *P. xanthomystax* by the indistinct broad black stripe down the back; *P. albimana* by the black dorsal streak and crescent at the base of the tail and white feet; *P. coronata* and *P. collaris* by the rufous band across the forehead.

* *Temple, cheek, forehead, and crown white.*

1. Prosimia albifrons. *The White-fronted Maucaco.* B. M.

Grey brown, hairs minutely punctulated; face and end of the tail black; hinder part of the head, including the forehead, cheeks, temples, and base of ears, pure white; chest, belly, and inside of the limbs whitish grey.

Lemur albifrons, *Geoff.*; *Audeb. Makis*, t. 3; *Bennett, Zool. Gardens*, i. p. 299, fig.; *Hoeven, Nat. Tijdsch.* xi. t. 1. f. 2 (a skull). L. Frederici, *Schinz*, p. 112. Prosimia albifrons, *Gray*! *Lesson.*

Hab. Madagascar. Living in the Zoological Gardens.

** *Temple, under the ear, and throat white.*

2. Prosimia nigrifrons. B. M

Blackish or grey, greyer on the sides beneath; base of the ears reddish white; cheek, throat, and chest white; nose grey; orbits, forehead, cheeks, and end of the tail black or blackish.

Lemur nigrifrons, *Geoff.*; *Bennett, Zool. Gard.* i. p. 301, fig.; *Petiver, Gaz.* t. 17. f. 8. Prosimia ocularis, *Lesson.* P. nigrifrons, *Gray* !

Hab. Madagascar.

*** *Temple coloured like the back.*

3. Prosimia melanocephala. B. M.

Fur yellowish brown, washed with black; chin and beneath pale rufous; head black above; cheeks, under the ears, with a convex puff of hair of the same colour as the back; tail brown, blacker at the end; hands and feet dark reddish brown.

Prosimia melanocephala, *Gray, P. Z. S.* 1863, p. 137, t. 18 !

Young of same specimen (perhaps a hybrid with some other yellow-puffed species). Head rather paler; spot on side of the neck rather yellower and more silky and puff-like. B. M.

Hab. Madagascar.

4. Prosimia mongoz. *The Woolly Maucaco.* B. M.

Fur reddish grey; throat, chest, and beneath reddish grey; the crown of the head black; face, chin, streak up the forehead and across the crown of the head black; cheeks and sides of the forehead iron-grey.

Lemur mongoz, *Linn.* Mongous, *Buffon, H. N.* xiii. p. 298, t. 26. Lemur albifrons *of Menageries.* Woolly Maucaco, *Penn.* Prosimia (Mico) mongoz, *Lesson; Gray* ! Mongoz, *Edw. Glean.* i. t. 216.

Hab. Madagascar.

The specimens of this species vary in the breadth of the band or streak on the head; but it is always known by the black nose and the iron-grey spot on each side of the forehead. Skull elongate, length 3″ 6‴, breadth 2″; canines very large; interorbital space broad, convex; forehead flat; orbits produced on the sides.

**** *Temple rufous, the hair elongated (forming a kind of whisker) beneath.*

5. Prosimia rufifrons.

Fur grey, with two small white cross streaks on each side of the rump; throat and beneath rufous; nose and line up the middle of the forehead black; sides of nose, cheeks, and large spot on each side of the forehead white; tail blackish, rather rufous at the base.

Lemur mongoz, *Schreb. Säugeth.* i. t. 39 *a* (moderate). Lemur rufifrons, *Bennett, P. Z. S.* 1833, p. 106; *Fraser, P. Z. S.* 1845; *Zool. Typica*, t. (bad). Prosimia rufifrons, *Lesson; Gray* !

Hab. Madagascar. B. M.

Both Schreber's and Fraser's figures leave out the peculiar stripes on the side of the rump.

Lemur rufus (Geoff.), *Maki roux* (Audeb. Makis, t. 2), seems to resemble this species; but we have it not: it may be only a variety.

Lemur rufiventer (I. Geoff. Cat. Mamm. p. 71) and *Lemur flaviventer* (I. Geoff. Cat. Mamm. p. 72) are probably allied species.

6. Prosimia xanthomystax. B. M.

Fur grey brown, with a broad, black, indistinct dorsal streak; chin, chest, and beneath pale rufous; head and back of neck black; a large puffy spot on each side of the throat under the ear bright

rufous; a large spot on each side of the forehead over the eyes grey; tail brown, blackish-washed.

Lemur xanthomystax, *Gray, B. M.* Prosimia xanthomystax, *Gray, P. Z. S.* 1863, p. 138, t. 17.

Hab. Madagascar.

This may be easily known from *P. mongoz* (with which it agrees by having the grey spot on the forehead) by the dorsal streak and the red puff on the temples.

***** *Temples and cheeks and sometimes the sides of the neck rufous.*

7. Prosimia coronata. B. M.

Fur pale grey; beneath reddish white; face white; temples, cheeks, and forehead rufous; spot on the crown of the head black; tail blackish, rufous at the base.

Lemur coronatus, *Gray, Ann. & Mag. N. H.* 1842, x. p. 257; *Voy. Sulphur*, t. 4. Prosimia coronata, *Gray, P. Z. S.* 1863, p. 138.

Var. White. *Maki albinos*, Chenu, Ency. H. N. Quadr. p. 263, fig.

Hab. Madagascar.

Lemur chrysampyx (Scheurmann, Acad. Brux. xxii. 1848), according to M. I. Geoffroy, differs from the foregoing species in the absence of the black spot on the crown, and the white colour of the lower and outer parts.

8. Prosimia albimana. *The White-handed Maucaco.* B. M.

Fur dark iron-grey, with a black streak on the hinder part of the back, and a black broad crescent at the base of the tail; nose, outer base of the ears, hands, chin, chest, and beneath white; temples and sides of the throat rufous; spot on forehead and underpart of orbit blackish.

Lemur mongoz, *Audeb. Makis*, t. 1. L. albimanus, *Geoff.* Prosimia albimana, *Gray, P. Z. S.* 1863, p. 139; *Lesson.*

Hab. Madagascar.

See Lesson's *Propithecus Brissonianus*, from *L. mongoz*, var. *c*, Gmelin, said to be brown above, dirty white beneath, with a white nose and hands.

9. Prosimia anjuanensis. *The Grey-fronted Maucaco.* B. M.

Fur reddish iron-grey; chin and beneath paler; nose, head, nape, front of the body, and shoulders blackish grey; temples and outer base of the ears black; a large roundish spot on the side of the neck, under the ears, rufous; tail blackish-washed.

Lemur anjuanensis, *Geoff. Ann. Mus.* p. xix. 161. Simia sciurus, &c. *Pet. Gaz.* xiv. t. 8. Prosimia fusca, *Brisson.* P. bugi, *Lesson*, Sp. Mamm.

p. 227. Le mongous, Lemur nigrifrons, var., *F. Cuv. Mamm. Lithog.* t. L. albifrons, *Guérin, Icon.* t. 2. f. 3. P. anjuanensis, *Gray* !

Hab. Madagascar.

Easily known from *P. collaris* by the small size of the rufous spot on the side of the neck, and the black nose and head.

Considered by M. Cuvier the female of *L. albifrons*; but Mr. Macleay (Linn. Trans. xiii. p. 624) says that both sexes of this species have a white forehead.

10. Prosimia collaris. B. M.

Fur dark or pale iron-grey; nose, outer base of the ears, chin, throat, and beneath white; orbits, temples, sides of the face, chin, and sides of the throat rufous; tail iron-grey, rufous at the base.

Lemur collaris, *Geoff.* Prosimia collaris, *Gray, P. Z. S.* 1863, p. 139 !

Hab. Madagascar. B. M.

This species differs from *P. albimana* in the rufous spot on the side of the face being more extended, and the hands and feet are dark iron-grey. There is no dorsal stripe or crescent at the base of the tail.

See *Lemur rufus*, Audeb. Makis, t. 12. f. 2; Schreb. t. 39. f. 1. *Prosimia rufa*, Lesson, Spec. Mamm. p. 228. Golden orange above, yellowish white beneath; cheeks and forehead white, with a black band extending to the occiput; muzzle black; tail rufous, with a black tip.

Lemur rubriventer, *Is. Geoff. Compt. Rend.* xxxi. p. 876.
L. flaviventer, *Is. Geoff. Compt. Rend.* xxxi. p. 876.

B. *Head roundish; muzzle short.*

4. HAPALEMUR, I. Geoff.

Cutting teeth $\frac{2.2}{6}$, the upper ones behind the other on each side, crowded on the inside of the canine. Ears short and hairy. Tail elongate, hairy. Hinder limbs much longer than the front ones.

Hapalolemur, *Giebel*, 1859. Hapalemur, *Gray, P. Z. S.* 1863, p. 141.

Hapalemur griseus. B. M.

Dark iron-grey, with a yellowish tinge; hairs black, with a subapical reddish band; underside rather paler.

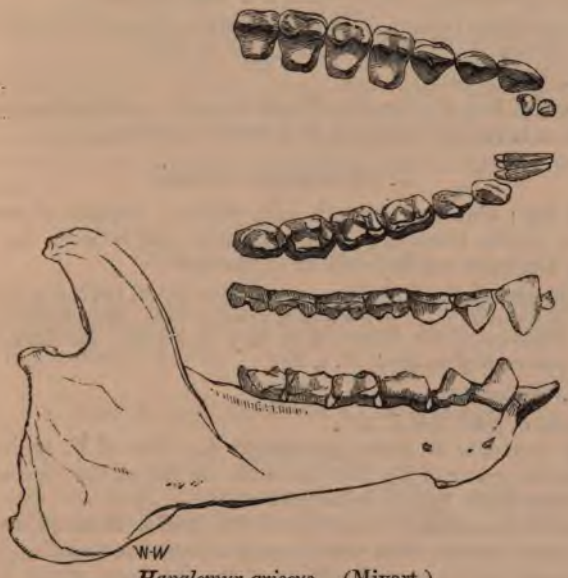
Lemur griseus, *Geoff.* 1796. Maki gris, *Buffon, Supp.* vii. t. 24. Cheirogaleus griseus, *Van der Hoeven, Tijdsch.* 1844, xi. t. 1. f. 1 (skull). Hapalemur griseus, *I. Geoff. Cat. Méth.* p. 75.

Hab. Madagascar. Shot in the woods.

The upper cutting-teeth are placed one before the other, and crowded so as to be on the inner side of the canine.

See *Hapalemur olivaceus*, I. Geoff. Cat. p. 75. *Hab.* Madagascar.

Fig. 3.



Hapalemur griseus. (Mivart.)

5. CHEIROGALEUS, Geoff.

Head very short, muzzle tapering. Ears small, hidden, bald on the edge. Cutting-teeth $\frac{2.2}{6}$, the middle larger, in an arched series on sides of intermaxillaries; the first false grinder in the upper jaw large, conical, erect, like a small canine, and in the lower jaw also rather large. Legs rather elongate, more equal than in the true Lemurs. The feet are short and broad, about two-thirds of the length of the shank.

Myspithecus, *Fr. Cuv.* 1833. Myoxicebus *et* Cebugale, *Lesson*, 1840. Cheirogaleus, *Geoff.*; *Wagner*, 1840; *Gray*, *P. Z. S.* 1863, p. 142.

M. Isidore Geoffroy, in his account of the genus *Hapalemur*, states that in *Cheirogaleus* "the cutting-teeth are in straight cross lines, and the ears are membranaceous." If this is correct, the species here described are not *Cheirogalei*.

1. Cheirogaleus Milii.

"Grey brown; palpebræ, sides of mouth, and whiskers black; throat, chest, and belly white; ears moderate, scarcely exserted, edge smooth, crest hairy; head globose; muzzle broad, depressed."

Maki nain, *F. Cuv. Mamm.* 1821. Cheirogaleus Milii, *Geoff.* 1828, *P. Z. S.* 1863, p. 142.

Hab. Madagascar.

2. Cheirogaleus typicus. B. M.

Reddish brown; cheeks, throat, and beneath white; orbits blackish; tail cylindrical; fur on outside of ears blackish.

Cheirogaleus typicus, *A. Smith, S. African Journal*, ii.; *Gray, Cat. Mamm. B. M.* p. 17; *P. Z. S.* 1863, p. 142.

Hab. Madagascar.

Length of foot 2″; length of head about 2″, and width about 1½″, as well as it can be measured on a stuffed specimen.

3. Cheirogaleus Smithii. B. M.

Pale bay; chin and beneath pale yellow; outside of ears pale brown; orbits blackish; streak on nose and between the orbits white; the hairs are slate-colour at the base.

Cheirogaleus Smithii, *Gray, Ann. & Mag. N. H.* 1842, x. p. 257; *Cat. Mamm. B. M.* p. 16; *P. Z. S.* 1863, p. 143. Microcebus pusillus, *Waterhouse, Cat. Mus. Z. S.* ed. 2. p. 12. no. 89. Le Rat de Madagascar, *Buffon, Supp.* iii. t. 20 ?

Hab. Madagascar.

Length of hind foot 1″ 2‴.

This specimen is about one-fourth the size of *C. typicus*. It may be the young of it; but the teeth, so far as one can see in a stuffed specimen, appear to be perfect.

There is a specimen in spirits in the British Museum, from the Zoological Society, that was named *Microcebus pusillus* by Mr. Waterhouse in the second edition of the Catalogue of the Museum of that Society, which agrees with this animal in almost all particulars; but the ears appear larger and bald, and the fur of the under part of the body whiter—perhaps both particulars arising from its having been preserved in spirits. The length of the feet and the teeth agree; but the feet and, especially, the hands are white and hairy, while in the dry specimen they are brown and nearly without hair.

It is sad to observe the persistence with which an error may be endowed. Vigors and Horsfield, in the 'Zoological Journal' in 1828, described an American Douroucouli as a Lemur, under the name of *Cheirogaleus Commersonii*, believing that it came from Madagascar. This error was soon corrected; but Lesson retains it among the Lemuridæ, and renamed it *Glicebus rufus*; Schinz, in his 'Systematic Catalogue,' published in 1844, still retains it, and calls it *Scartes rufus* (vol. i. p. 102); and Giebel, 'Die Säugethiere,' published in 1859, p. 1018, still regards it as a *Cheirogaleus*.

Le Rat de Madagascar (Buffon, Supp. iii. t. 20) well represents this animal; but it has been considered the type of the genus *Microcebus*, which is described as having a long slender foot.

The following generic and specific names have been applied to this animal:—

Microcebus, *Geoff.* 1828. Myscebus, *Lesson*, 1840. Myocebus, *Schinz*, 1844.

Microcebus rufus, *Geoff. Cours Mamm.* 1825; *Is. Geoff. Cat.* 80. Lemur pusillus, *Geoff. Bull. Phil.* i. p. 89, 1795. Galago madagascariensis, *Geoff. Tab. d. Quadr.* 1812.

Buffon's figure of *le Rat de Madagascar*, which is the type of *Lemur pusillus*, represents the animal as having a short hind foot, and in that particular better represents my *Cheirogaleus minor* than any animal that M. I. Geoffroy would place with the *Galagina*, or M. Dahlbom with the *Macrotarsæ*. I have never seen a *Lemur* with small ears and a long foot; so that I suppose a true *Microcebus* has not occurred to me; but I doubt much if Buffon's figure represents the genus.

Tribe II. GALAGONINA.

The ears elongate, bald, thin, very contractile on the hinder edge; folding back on the head. Feet broad, short, about two-thirds the length of the shank or shin.

A. *Head elongate; face produced. Eyes moderate.*

6. OTOGALE.

The ears very long, membranaceous, the hinder edge contractile, so as to fold up the conch like the long-eared Bats. Cutting-teeth $\frac{2.2}{6}$; upper slender, equal, nearly in the same line; lower close together, and projecting horizontally forwards. Skull rather elongate, broad. Anterior false grinder elongate, erect, conical, compressed, with a slight notch at each side near its base; the lower canine large, conical, bent up; grinders large, broad. Feet broad, short, only two-thirds the length of the shank. The toes broad, with distinct roundish disks. The thumb very broad. The eyes very large; the iris very contractile, leaving a very small, erect, oval or lanceolate pupil. Tail very long, with spreading hairs, tapering at the end.

Otogale, *Gray, P. Z. S.* 1863, p. 139. Callotus, *Gray, P. Z. S.* 1863, p. 145 (from life).

* *Skull and face elongate.* Otogale.

1. **Otogale Garnettii.** *The Black Galago.* B. M.

Pale brown, yellowish beneath, with a white narrow band on each side of the loins; tail half the length of the body, perhaps injured.

Otolicnus Garnettii, *Ogilby, P. Z. S.* 1838, p. 6. Otogale Garnettii, *Gray, P. Z. S.* 1863, p. 140, f. (skull). O. crassicaudata, var. *a*, *Lesson.*

Hab. Port Natal.

Skull, length 2″ 11‴, breadth 1″ 10½‴.

Fig. 4.

Otogale Garnettii.

2. Otogale crassicaudata. B. M.

Fur dark brown; tail very long and thick.

Otolicnus crassicaudatus, *Peters*, *Mossamb.* t. 2, t. 4. f. 1–5; *Schrank*, *Cat. Bones B. M.* Galago crassicaudatus, *Geoff.* 1812; *Blainv. Ostéog.* t. 1. f. 1. O. galago, *Illiger*. Otogale crassicaudata, *Gray*, *P. Z. S.* 1863, p. 140! Lemur crassicaudatus, *Blainv.*

Hab. East and West Africa; Mozambique, *Sundevall.*

Skull, length 2″ 7‴, breadth 1″ 8‴.

3. Otogale Monteiri. B. M.

Uniform pale grey; sides of the nose rather dark; hair of the body soft, dark slate-colour, with long, white, rather crisp tips.

Callotus Monteiri, *Gray*, *P. Z. S.* 1863, p. 145! Otogale crassicaudata, var. Kirkii, *Gray*, *P. Z. S.* 1864, p. 456! Galago Monteiri, *Bartlett*, *MS.*!

Hab. Western Africa: Angola.

Skull very similar to the preceding. The teeth slightly different. See also *Sclater*, *P. Z. S.* 1864, pp. 711, 712. The difference in the colour I do not think can depend on the season, *O. Monteiri* was grey at all times.

Fig. 5.

Galago Monteiri. (Mivart.)

Fig. 6.

Galago Monteiri. (Mivart.)

** *Head short, broad; face short, conical; eyes large.* Euoticus.

4. Otogale pallida. B. M.

Fur pale grey, whitish beneath, with a roundish white spot on the side, over the axilla, and the groin ; tail very long, cylindrical, nearly half as long again as the body and head.

Otogale pallida, *Gray, P. Z. S.* 1863, p. 140, t. 19.

Var. Tip of tail white.

Otolicnus apicalis, *Du Chaillu, Travels*, p. 471; *Boston Journ.* 1861, vii. p. 361. Microcebus elegantulus, *Leconte, Proc. Acad. N. S. Philad.* 1857 ; *Slack, Proc. Ac. Nat. Sci. Philad.* 1861, p. 153.

Hab. Fernando Po, *Capt. Burton.*

Feet 2″ 6‴. Skull, length 2″, breadth 1″ 4‴; orbits prominent and produced on the sides; wider than the zygomatic arch.

This species, which has the teeth exactly like the other Otogalæ, by the shortness of its head and the large size of the eyes and orbit of the skull forms a passage to the Galagoids.

Fig. 7.

Otogale pallida.

B. *Head roundish; face short. Eyes very large.*

7. GALAGO.

Ears large, pellucid, membranaceous, hinder edge contractile. Cutting-teeth $\frac{2.2}{6}$; the upper equal, slender, the lower shelving upward. The upper canines erect; the lower ones decumbent, shelving forward and upward. The first false grinder short, broad, three-lobed, like the others, and not prominent and erect like the canines. Feet elongate, slender, nearly as long as the shank or shin; tarsal bone longer than the metatarsal.

Cheirosciurus, *Cuv. & Geoff.* 1795. Galago *et* Galagoides, *A. Smith.* Scartes, *Swainson.* Galago, *Gray, P. Z. S.* 1863, p. 145.

Mr. Ogilby says that the index finger is partly opposable to the other fingers and forms a group with the thumb (*Proc. Zool. Soc.*); but this does not agree with our observations or with the construction of the fingers of specimens in spirits.

* *Tail thick, with spreading hairs; fingers and toes very slender, elongate; the upper cutting-teeth placed in an arched line, one before the other.*

1. Galago Allenii. B. M.

Fur dark, blackish brown; forehead, rump, and base of tail grey; arms and legs reddish-washed; nose-streak and underside of body whitish; tail black; fingers and toes very slender, free; ears moderate. Length of hind foot 2″ 10‴. Skull (imperfect), length about 2″ 2‴, breadth 1″ 5‴.

Galago Allenii, *Waterhouse, P. Z. S.* 1837, p. 87. Otolicnus Allenii, *Van der Hoeven.* Galago acaciarum, var., *Lesson.*

Var. *gabonensis.* Skull small, 2″, width 1″ $4\frac{1}{2}$‴. B. M.

Galago otolicnus gabonensis, *Mivart, P. Z. S.* 1864, p. 647.

Hab. West Africa: Gaboon; Fernando Po.

There is a considerable difference in the two skulls of this species which we have, though the skins resemble each other very closely, so much so that it would not be easy to distinguish them as varieties.

The one from Fernando Po is larger, and the upper cutting-teeth form an arched series, and the grinders are very large and broad. The one from the Gaboon is rather smaller in size, the upper cutting-teeth are in nearly the same straight transverse line, and the grinders are scarcely three-fourths of the general width of those of the other skull: both skulls seem to have their perfect and permanent teeth. Probably this may arise from the sex of the specimen; but the sexes are not marked, and there is no external character to distinguish them. In a third and younger specimen the upper cutting-teeth are subequal, and placed one above the other; so that this seems to be the normal position of the teeth.

Fig. 8.

Galago Allenii. (Mivart.)

** *Tail clavate, hair of lower part adpressed, of end spreading: the fingers and toes broader, shorter; upper cutting-teeth very slender, in a straight cross line.* Otolicnus.

Fig. 9.

Galago maholi.

2. Galago maholi. B. M.

Brownish grey; nose-streak, face, throat, and beneath whitish; ears large; tail elongate, rather longer than head and body, subclavate, rather browner than the back.

Length of foot 2″ 3‴. Skull, length 1″ 6‴, breadth 1″ 0‴.

Galago maholi, *A. Smith, Illust. S. African Z.* t. Octolicnus galago, *Wagner, Säugeth. Suppl.* i. 292? G. senegalensis, var., *I. Geoff. Cat.* p. 81. Octolicnus galago, var. australis, *Wagner.* ? Little Maucaco, Lemur ——, *Brown. Illust. Zool.* t. 44, 1776. L. murinus, *Shaw, Zool.* p. 106, t. 37 (upper fig.). Scartes ——, *Swainson, Class. Mamm.* p. 352, 1838.

Var. Smaller; orbits darker. B. M.

Hab. South Africa.

Brown's figure seems to represent this species; but the hind foot

is too short—having about the same proportion, compared with the shank-bone, as in *Lepilemur*; therefore I have only referred it to this species with doubt. In Brown's figures the long claw is represented as being on the great toe, instead of the first toe.

The fine male specimen which served as the type of Sir Andrew Smith's figure has the orbits of the same colour as the rest of the face; in two other rather smaller specimens in the Museum the orbits are darker, in one nearly black.

There are two skulls of this species in the Museum Collection both from South Africa. They vary very slightly in the size of the teeth, especially in the breadth or squareness of the grinders. The upper cutting-teeth are cylindrical, elongate, of the same size, and placed in a nearly straight cross line; the first upper false grinder is broad and lobed, like the second one.

3. Galago senegalensis. B. M.

Ears oblong, rounded at the end; fur grey; nose-streak, chin, and beneath white; tail and feet blackish brown; tail rather longer than the body and head; orbits blackish.

Length of hind foot 2″ 3‴, of head 1″ 7‴.

Octolicnus galago, *Illiger*. Galago senegalensis, *Geoff.* 1796; *I. Geoff. Cat.* 81. G. Geoffroyii, *Fischer*. G. acaciarum, *Lesson*. Lemur galago, *Schreb. Säugeth.* t. 38 B. Lemur calago, *Shaw, Zool.* p. 108. L. minutus, *Cuv. Tab. Elém.* p. 101. Galagoides senegalensis, *A. Smith*.

Hab. West Africa: Senegal; Gambia.

Fig. 10.

Galago sennariensis.

4. Galago sennariensis. B. M.

Bluish grey; face and feet blacker; orbits black; throat and underpart of body and inside of limbs white; tail very long, one-half as long again as the body and head, blackish; ears very large, rounded; fingers and toes slender.

Length of hind foot 2″. Skull, length 1″ 6‴ (about the back being imperfect), width 1″ 2‴.

Otolicnus teng, *Hebend. MS. Sundev. K. V. Acad. Hand.* 1842, p. 202. Galago senegalensis, *Rüpp. Säugeth.* t. 8. Galago (senegalensis) sennariensis, *Kotzschy, MS.*; *Gray, P. Z. S.* 1863, p. 147 !

Hab. Sennaar, *Rüppell*; Kordofan, *Rüppell*.

The upper front cutting-teeth are very slender, longer and more produced, the upper grinders are broader and squarer, and the hinder one is more triangular than in *G. maholi*.

There are three specimens of this species in the Museum, unfortunately not in a good condition; but they all decidedly differ from *G. maholi*, especially in the length of the toes, and in the fingers and toes being more slender. These three species are very similar, but I think they may easily be distinguished by the length and colour of the tail. *G. maholi* and *G. senegalensis* have the tail not more than one-fifth as long again as the body and head. In *G. maholi* the tail is rather dark, but grey; in *G. senegalensis* it is much darker, being blackish brown. In *G. sennariensis* the tail is much longer than the body and head, and black. There seems also to be some difference, although difficult to describe, in the proportion of the ears and the head.

Fig. 11.

Galago sennariensis. (Huxley.)

The following species have not come under my observation:—

1. *Galago conspicillatus*, I. Geoff. Cat. p. 81. Ears acute, triangular, acute at the tip; fur above black-brown, beneath grey; tail elongate. *Hab.* Port Natal; South Africa; Guinea.
2. *Otolicnus peli*, Temm. Esquiss. Zool. p. 42: Mus. Leyden.
3. *Otolicnus senegalensis*, Peters, Mossamb. ii. t. 4. f. 11–13. *Hab.* Mozambique.

*** *Tail slender, cylindrical; ears smaller.* Hemigalago.

Hemigalago, *Dahlbom*, 1857.

"A new genus, intermediate between *Galago* and *Microcebus*, I. Geoff."

5. Galago Demidoffii. B. M.

Brown; side of face dark; nose-streak white, narrow; chin, throat, and below reddish grey; tail one-half as long again as the body and head, darker at the hinder half; skull, length 1″ 5‴, width 10½‴; length of hind foot 1″ 8‴.

Galago Demidoffii, *Fischer, Mém. Ac. Mosc.* i. t. 24. f. 1, 1806. Hemigalago Demidoffii, *Dahlbom, Stud.* p. 230, t. 10. Galago senegalensis, *L. Fraser.* G. murinus, *Murray, Edinb. Phil. Journ.* n. s. x. t. 11. Galagoides Demidoffii, *A. Smith.*

Hab. West Africa: Gaboon.

There are several specimens of this animal in the Museum Collection. The skin of the adult measures about 5 inches long, from the tip of the nose to the base of the tail; the tail is 7½ inches long; the hind foot and shin are about 1 inch 8 lines long. There are some smaller specimens in spirits, which appear to be younger, which have the hind foot only from 1 inch 4 lines to 1 inch 6 lines long.

I am induced to suppose that Mr. Murray's *Galago murinus* from Old Calabar is the young of this species, as the hind foot is figured about 1½ inch long.

The skull without a lower jaw, which in the Museum Catalogue of Bones is put under *Microcebus myoxinus* (p. 33), evidently belongs to this species.

Fig. 12.

Galago Demidoffii.

8. LEPILEMUR? I. Geoff. 1851.

Cutting-teeth $\frac{2.2}{6}$, the two front upper longer. Ears elongate, membranaceous, bald, and exposed. Foot broad, shorter than the shank. Tail cylindrical, covered with close-set short hair.

Lepilemur, *Geoff.*; *Gray, P. Z. S.* 1863, p. 143. Microcebus, *Waterhouse*; *Peters*; *Mivart.*

Fig. 13.

Lepilemur murinus. (Mivart.)

* Back uniform. Species 1.
** Back with black streak, forked on forehead. Species 2.

** Back uniform.*

1. Lepilemur murinus. B. M.

Back pale reddish grey, underpart of the fur deep black; broad streak up the nose between the orbits, the cheeks, and the underside whitish; in front of the orbits on the side of the nose brown; tail rather browner, slender, rather longer than the head and body; ears rather large, rounded at the end, pale, covered with short scattered hairs on the outside.

Lemur murinus, *Miller, Cim. Phys.* p. 25, t. 13. Microcebus murinus, *Waterhouse, Cat. Mus. Zool. Soc.* p. 12. no. 90 (male). Galago minor, *Gray, Ann. & Mag. N. H.* 1842, x. p. 257. ? Little Macaco, *Penn. Quad.* Lepilemur murinus, *Gray, P. Z. S.* 1863, p. 143.

Hab. Madagascar: from Zoological Society.

Miller's figures very well represent this animal, but the tail is more bushy and browner than in our specimens; the feet are of the proper size and form. The skull of the adult male has a rather longer nose than those of the typical *Galago*; and the orbits are very large, but scarcely so large as some of the species of that genus. It is 1″ 2½‴ long, and 9½ lines broad. The two front upper cutting-teeth are large and bifid, the inner ones small and cylindrical. The upper canines are erect; the lower ones are decumbent. The first and second upper false grinders are slightly conical and compressed.

Fig. 14.

Lepilemur murinus.

See

a. *Microcebus myoxinus*, Peters, Mossamb. Säugeth. i. p. 14, t. 4. *Lepilemur myoxinus*, Gray, P. Z. S. 1863, p. 144. The figure of Dr. Peters agrees pretty well with the Museum specimen of *L. murinus*; but the whole colour of the fur is rather darker, and the ears are larger. The figure of the skull also agrees well with that of *L. murinus*. This is not a *Microcebus* as now restricted; the feet are too short and broad for that genus. In the figure the feet are short, two-thirds of the length of the tibia. *Hab.* Eastern Madagascar. Skull, length 1″ 4‴ (according to the figure), breadth 10½‴. It is very like *Cheirogaleus Smithii*, but the ears are too large. The ears are very apt to be unnaturally stretched in the stuffing, or the converse and allowed to shrink in the drying.

b. *Otolemur agisymbanus*, Coquerel, Rev. et Mag. Zool. 1859, p. 459, t. 18. f. 1 (skull). From Zanzibar Island. Coquerel "believes it to be *Cheirogaleus galago*."

c. *Lepilemur mustelinus*, I. Geoff. Cat. Mamm.; Archives du Mus. t. Rufous; throat white; forehead and cheeks grey; lower part of body yellowish; the tail, hands, and lower part of the legs yellowish grey; outer side of the last third of the tail brown; tail two-thirds the length of the body; ears large, rounded, membranaceous, dark. Length of head and body 14″, of tail 10″. *Hab.* Madagascar, 1842. The description of this animal agrees in most particulars with *Lepilemur*, but it is said to have no upper cutting-teeth. May not this be a peculiarity of the single specimen on which the species is founded?

** *Back with a black streak, forked on the occiput.*

2. Lepilemur furcifer. B.M.

Grey; back with a streak, forked on the occiput and extended to the eyes; end of the tail black.

Lemur furcifer, *Blainv. Ostéogr.* p. 35, t. 7, 1839. Cheirogaleus furcifer, *Is. Geoff.* Cheirogale, *Chenu, Encycl. Quadrum.* p. 269, f. 218? Lepilemur furcifer, *Gray, P. Z. S.* 1863, p. 145. Microcebus furcifer, *Mivart, P. Z. S.* 1864, pp. 621 (fig.), 642.

Hab. Madagascar.

Dr. Dahlbom observes that this species would be a *Lepilemur* if it were without upper cutting-teeth; but as our *Lepilemures* have these teeth, I think it had better be placed in this genus.

Tail elongate; face rather compressed; orbit large, like *Otogale*; the cutting-teeth produced horizontally in front, the lower much the longest; the first upper false grinder elongate like a canine.—*Blainv. Ostéog.* i. t. 7. f.

Fig. 15.

Lepilemur furcifer. (Mivart.)

Tribe III. MICRORHYNCHINA.

Head short, subglobose. Face short, tapering. Eyes large. Ears small, hairy, hidden.

9. MICRORHYNCHUS.

Tail elongate, cylindrical, hairy. Ears hidden under the fur. Thumb and index finger without the second phalange. Nostrils separated by a narrow septum. Hind foot short and broad. Claws elongate, convex, acute; claw of first toe elongate, cylindrical.

Microrhynchus, *Jourdan*, 1834; *Gray, P. Z. S.* 1863, p. 141. Avahis, *I. Geoff.* 1835. Indris, *A. Smith*, 1834. Semnocebus, *Lesson*, 1840. Lichanotus, *Illiger; Wagler.* Avahi, *Jourd.* Habrocebus, *Wagner.*

Microrhynchus laniger. *The Avahi.* B. M.

Brown, varied; rump, spot over groin, and beneath whitish, with a narrow white lunate band on the forehead.

Lichanotus laniger, *Illiger*. Lemur laniger, *Gmelin*. Maki à bourres, *Sonnerat*, t. 89; cop. *Buffon, Supp.* viii. t. 35. Lemur lanatus, *Schreb.* Indris longicaudatus, *Geoff. Ann. Mus.* xix. p. 158. L. brunneus, *Link, Beytr.* p. 65. Semnocebus Avahi, *Lesson*; *Hoeven, Nat. Tijds.* xi. t. 3, and t. 2. f. 6, skull. Avahi, *Jourdan, Institute*, 1834, p. 231.

Hab. Madagascar.

Length of foot about $2\frac{1}{2}$ inches.

Tribe IV. INDRISINA.

Head elongate. Face well developed. Eyes moderate. The hind foot short, broad. Great toe very long, slender.

Lichanotina, part., *Gray, Ann. Phil.* 1825. Indrinina, *Gray, P. Z. S.* 1863.

10. PROPITHECUS.

Ears short, smooth inside, and visible in the fur. Nostrils separated by a moderate septum. Tail elongate. The two middle upper cutting-teeth very large, oblique, sharp-edged. Great toe long, hairy.

Propithecus, *Bennett, P. Z. S.* 1832, p. 20. Macromerus, *A. Smith*, 1834. Habrocebus, *Wagner*, 1840.

Cutting-teeth $\frac{2.2}{2}$; upper chisel-shaped, expanded at the end, two middle larger; lower elongate, subulate, decumbent. Canines $\frac{1}{1}$; upper canines broad, lower elongate, decumbent. Fur formed of long, straight, silky hairs. Head, nose, and top of the back black. Forehead, ears, thorax, and tail yellowish white. Shoulders, sides, and beneath white. Lips with black hairs. Between the eyes and over the claws are some yellowish hairs.

Propithecus diadema. *The Propitheque.* B. M.

Grey; limbs yellowish; hand and top of the head black; shoulders and part of back blackish; circumference of face white.

Propithecus diadema, *Bennett, P. Z. S.* 1832, p. 20. Macromerus typicus, *A. Smith, South African Journal.* Lemur diadema, *Blainv. Ost.* t. 8. f. 3; t. 11. f. 2.

Hab. Madagascar.

11. INDRIS.

Upper cutting-teeth large, strong, compressed, one before the other in an arched line. Ears exserted, hairy. Nostrils separated by a very narrow septum. Body thick. Feet short; tarsus shorter

than the metatarsus. Tail rudimentary, very short. The great toe very long, slender, and covered with hair.

Lichanotus, *Illiger*, 1811. Pithelemur, *Lesson*, 1840. Indris, *Lacép.*; *Geoff.* Indri, *Cuvier.* Stolicnus, *Flem.*

Indris brevicaudatus. *Black Indri.* B. M.

Blackish; ears short, rounded; muzzle, abdomen, and inside of limbs greyish; loins white.

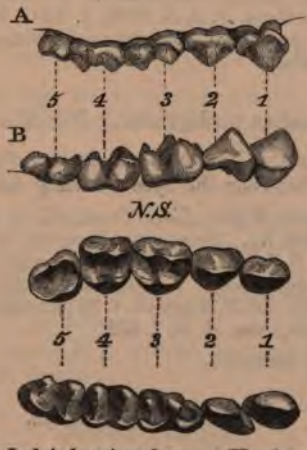
Indris brevicaudatus, *Geoff. Ann. Mus.* xix. p. 157. Lemur indri, *Gmel.* i. p. 42. Lichanotus niger, *Gray.* L. indri, *Illiger.* Indri maucaco, *Penn. Quad.* i. p. 228. Indri niger, *Audeb. Indris*, t. 7. f. 1. Indri, *Sonnerat, Voy. Ind.* ii. t. 688; *Schreb.* t. 38, c. Pithelemur indri, *Lesson, Spec. Mamm.* i. p. 208.

Var. white, called *Simpoune.*

Indris albus, *Vinson, Compt. Rend.* lv. p. 829.

Hab. Madagascar.

Fig. 16.



Indris brevicaudatus. (Huxley.)

The claws, like those of most of the *Lemuridæ*, when perfect, are keeled, and end in an acute tip.

Skull. Length 3″ 10‴, breadth 2″ 3″.

The four lower cutting-teeth of the *Indris* occupy about the same space as the six in the other genera, the central ones being broader, while in the other genera the two central pairs are very much compressed and slender; and the upper cutting-teeth are stronger and broader; indeed the general character of the skull is to be stronger, though the teeth are fewer. In other respects there is very little difference in the dentition.

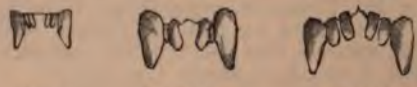
Section B. *Fore and hind legs equal. Tail none. Feet short.*

Tribe V. LORISINA.

The fore and hind legs nearly equal in length. Feet short, broad. Great toe very broad. Tail none. Index finger short.

Loridina, *Gray, Ann. Phil.* 1823. Lorisina, *Gray, P. Z. S.* 1863, p. 149.

Fig. 17.



Loris. *Nycticebus.* *Perodicticus.* (Mivart.)

12. NYCTICEBUS.

Head subglobose. Body and limbs stout and strong.

Bradicebus, *Geoff.* Bradycebus, *Blainv.*; *Lesson.* Nycticebus, *Cuvier*, 1795; *Geoff.*; *Gray, P. Z. S.* 1863, p. 149; *Mivart, P. Z. S.* 1864, p. 643. Stenops, *Illiger.* Bradylemur, *Blainv.* Cucang, *Cuvier.* Tardigradus, *Bodd.*

1. **Nycticebus tardigradus.** *The Slow Lemur.* B. M.

Yellowish ashy, with a brown dorsal streak; forehead brown, narrow whitish streak between the eyes; cutting-teeth 4 above.

Lemur tardigradus, *Raffles, Linn. Trans.* viii. p. 247; *Bennett, Gard. Zool. Soc.* p. 139, fig. Stenops tardigradus, *Hoeven, Nat. Tijdschr* viii. p. 345, t. 6. f. 3, 4, 8. Lemur tardigradus, *Linn. S. N.* Tardigradus cucang, *Bodd.* Nycticebus Bengalensis, *Geoff.*; *Vosmaer*, t.; *Buffon, H. N. Supp.* vii. t. 36; *Audeb. Loris*, t. 1; *Mamm. Lith.* t.; *Knight, Mus. A. N.* f. 202.

Hab. Borneo and Sumatra.

2. **Nycticebus javanicus.** B. M.

Yellowish, with a broad dorsal streak; nose, interorbital region, and forehead white; upper cutting-teeth 2.

Nycticebus javanicus, *Geoff.* 1812; *Ann. Mus.* xix. p. 164; *V. d. Hoeven, Nat. Tijdschr.* viii. p. 345, t. 6. f. 1, 2, 3, t. 7. f. 5–7.

Hab. Java.

See *Nycticebus ceylonicus*, Geoff. Ann. Mus. xix. p. 164; Seba, i. t. 47. f. 1. *Lemur tardigradus*, var. c, Lesson, Spec. Mamm. i. p. 242. Blackish brown; back black, tinted with yellow ashy on the belly. *Hab.* Ceylon. May be only a variety of the former.

13. LORIS.

Tail none. Cutting-teeth $\frac{4}{4}$, upper small, nearly equal. Nose elongate, very acute. Body slender. Limbs very long. Thigh elongate, nearly half as long as the body. Tarsus moderate. Eyes large, close together.

Prosimia, *Cuv. & Geoff.* 1798. Loris, *Geoff.* 1796; *Gray, P. Z. S.* 1863, p. 150. Stenops, part., *Illiger.* Arachnocebus, *Lesson*, 1840.

Loris gracilis. B. M.

Fur of back rufous, sooty-grey varied; cheeks and beneath ashy white; spot between the eyes and in front of the ears white.

Loris gracilis, *Geoff.*; *Audeb. M.* f. 2; *Blainv. Ostéogr.* t. 7. f. 5. Lemur tardigradus, *Linn. Mus. A.*; *Schreb.* t. 38. L. lori, *Zimm.* L. ceylonicus, *Fischer, Makis*, t. 7, 8, 9 & 18. Loris, *Buffon, H. N.* xiii. t. 30, 32; *Shaw, Zool.* i. t. 31; *Seba*, i. t. 35. f. 1, 2; *Hoeven, Tijds.* i. t. f. 4, skull; *Knight, M. A. N.* f. 203, 204. Stenops gracilis, *Voigt.* Arachnocebus, *Lesson.*

Hab. Ceylon; India: Pondicherry.

Tribe VI. PERODICTICINA.

The fore and hind legs nearly equal in length. Face short, broad. The hand broad. The index finger abortive, clawless. Eyes moderate.

14. PERODICTICUS, Bennett.

Tail shorter than the body. The hands and feet large. Fingers and toes free at the ends; the index finger rudimentary, but distinct. Lower cutting-teeth large, prominent, and projecting. The apices of the vertebræ of the back, neck, and withers projecting beyond the skin, like prickles.

Perodicticus, *Bennett, P. Z. S.* 1830, p. 109. *Gray, P. Z. S.* 1863, p. 150. Potto, *Lesson.*

Perodicticus potto. B. M.

Very slow; sleeps by day, rolled in a ball, with the head between the fore legs and folded into the chest, holding on by the fore and hind legs to the edge of the cage. Lively by night. Hand with only a very short rudimentary index, the ring finger rather the longest; foot similar, but with a regular index, armed with a long, arched, broad nail; nails thin, oblong, transverse, rounded at the end like the human; nose deeply nicked in the centre, with rather elongate semilunar nostrils on each side, rather higher than the tip of the nose, naked, flesh-coloured; upper part of nose rather naked; eyes large, very convex, pupil oblong, rather oblique; the four vertebræ between the fronts of the bladebones produced beyond the skin,

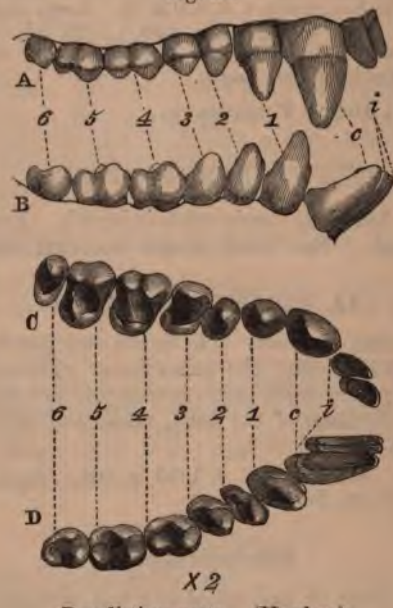
forming serrated crests covered with a blackish skin. Blackish brown; fur yellowish, blackish-washed on the surface; chin, throat, and beneath yellowish brown; hair very close, woolly, yellowish, with longer black-tipped and rigid hairs; penis retractile into a sheath, with roundish opening; scrotum large.—*Warrick*, p. 46, t. 8. f. 28.

Perodicticus Geoffroyi, *Bennett*, *P. Z. S.* 1830, p. 109; *Murray*, *Proc. Roy. Phys. Soc. Edinb.* 1860, p. 191, figs. of hands and feet. Potto Bosmani, *Lesson*. Lemur potto, *Gmel. S. N.* p. 42. Galago guineensis, *Desm. Mamm.* p. 104. Potto, *Bosman*. Nycticebus potto, *Geoff. Ann. Mus.* xvii. p. 114; xix. p. 115.

Hab. Sierra Leone, West Africa.

Skull and skeleton in British Museum.

Fig. 18.



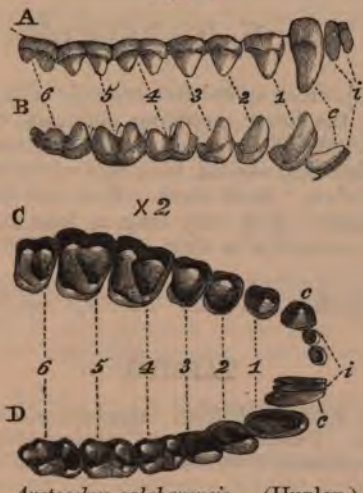
Perodicticus potto. (Huxley.)

15. ARCTOCEBUS.

Tail very short. Hands and feet small, with the lower phalanges (not including the thumb) united in the skin, the two upper joints free; the index finger abortive, reduced to a tubercle. Lower cutting-teeth small, hyaline, hidden by the lips.

Arctocebus, *Gray*, *P. Z. S.* 1863, p. 150; *Huxley*, *P. Z. S.* 1864, p. 335.

Fig. 19.



Arctocebus calabarensis. (Huxley.)

Arctocebus calabarensis.

Perodicticus calabarensis, *Smith*, *Proc. Roy. Phys. Soc. Edinb.* 1860, p. 172, f. 1, 2 (hands), f. 3, 4 (head). Arctocebus calabarensis, *Gray*, *P. Z. S.* 1863, p. 150; *Huxley*, *P. Z. S.* 1864, pp. 321, 335.

Hab. West Africa: Old Calabar.

Fig. 20.

Arctocebus calabarensis. (Huxley.)

A, left hand; B and C, left foot.

Fam. V. TARSIIDÆ.

Cutting-teeth $\frac{4}{2}$, erect, cylindrical, conical; the two upper front elongate, acute; the lower ascending obliquely, crowded between the canines. Grinders $\frac{6}{6} \cdot \frac{6}{6}$. The fingers and toes free, well developed. The first and second hind toes shorter, each with an elongate curved claw. Head short. Eyes and orbits very large. Limbs free, elongate. Foot very long, as long as the shin. Tail elongate, slender covered with short hairs; the tip with a pencil of longer hairs.

Tarsina, *Gray, Ann. Phil.* 1828. Tarsidæ, *Gray, P. Z. S.* 1863, p. 150.

TARSIUS.

Tarsius, *Storr*, 1780; *Daub.* 1792. Macrotarsus, *Cuv. & Geoff.* Tarsier, *Lacép.* Prosimia, *Shaw.* Cephalophacus, *Swainson*, 1835. Hypsicebus, *Lesson*, 1840. Rubienus, *Gray*, 1821.

Tarsius spectrum. *The Tarsier.* B.M.

Tarsius spectrum, *Geoff.; Dahlbom, Studier*, t. 11 (skeleton). T. Pallasii, *Geoff.* T. Daubentonii, *Audeb.; Geoff.* T. fuscomanus, *Fischer.* T. bancanus, *Horsf. Java.* t. Cephalophacus bancanus, *Swainson, Lard. Encyc.* Hypsicebus bancanus, *Lesson, Spec. Mamm.* Lemur tarsius, *Erxl.* L. spectrum, *Pallas.* Didelphis macrotarsus, *Gmelin.* Tarsier, *Buffon, H. N.* xiii. Macrotarsus Buffonii, *Link, Beytr.* p. 66. Woolly Jerboa, *Penn.* p. 298.

Hab. Borneo; Celebes.

** *Teeth of only two kinds. Canines none.*

Fam. VI. DAUBENTONIIDÆ.

Cutting-teeth $\frac{2}{2}$, compressed, very large, with a space between them and the grinders. Canines none. Grinders $\frac{4}{3} \cdot \frac{4}{3}$. Limbs free. The fingers and toes well developed. The fingers very long and slender. The great toe broad. The index finger with a sharp curved claw. Claw of thumb flat. Face short. Tail elongate, hairy.

Cheiromyidæ, *Bonap.; I. Geoff. Cat.* Cheiromyina, *Gray, Ann. Phil.* 1829. Glirisimiæ, *Dahlbom.* Daubentoniadæ, *Gray, P. Z. S.* 1863, p. 151.

DAUBENTONIA.

Daubentonia, *Geoff. Decad. Philos.* iv. p. 193, 1795; *Dahlbom*, 1851; *Gray, P. Z. S.* 1863, p. 151. Aye-Aye, *Lacép.* 1799. Cheiromys, *Cuvier*, 1800. Chiromys, *Illig. Prod.* 1811. Mystipithecus, *Blainv.*

Cuvier refused to use the name proposed by Geoffroy, because it was given in honour of a person; but as this rule has not been generally observed, the objection ceases to be operative.

Daubentonia madagascariensis. *The Aye-Aye.* B. M.

Daubentonia madagascariensis, *Geoff.*; *Dahlbom, Studier*, p. 236, t. 12. Aye-Aye, *Sonnerat, Voy. Ind.* ii. p. 138, t. 76, 1782. Sciurus madagascariensis, *Gmelin.* Cheiromys madagascariensis, *Geoff.* 1803; *Owen, Trans. Zool. Soc.* 1863.

Hab. Madagascar.

Suborder III. DERMOPTERA.

Limbs enclosed in an expansion of the skin. Fingers and toes short, webbed, with opposable thumbs; claws very sharp.

Fam. VII. GALEOPITHECIDÆ.

Cutting-teeth $\frac{4}{3}$; the upper middle small; side one compressed; lower shelving, pectinate. Canines $\frac{1}{1}.\frac{1}{1}$; like the molars. Grinders $\frac{5}{5}.\frac{5}{5}$. Head elongate. Ears small, rounded. Limbs short, subequal. Neck, limbs, and tail united by a hairy expansion, serving as a parachute. Toes and fingers short, compressed. Palm short. Teats placed in pairs in a large gland.

Galeopithecidæ, *Gray, Ann. Phil.* 1825; *P. Z. S.* 1863, p. 151.

Synopsis of Genera.

1. Galeopithecus. Tail and arms moderate.
2. Galeolemur. Tail and arms elongate.

1. GALEOPITHECUS.

Tail moderate, of 16 or 17 vertebræ. Arms moderate.

Galeopithecus, *Pallas*, p. 17; *Gray, P. Z. S.* 1863. Chiromys, *Illiger.*

* *Nose of skull elongate, as long as broad. Grinders small. False grinders elongate, narrow. Gonyx of lower jaw swollen.* Galeopithecus.

1. Galeopithecus volans. *The Colugo.* B. M.

The second and third upper grinders low, broader than high, with the front and hinder edge serrated; the first moderate, four-lobed. The first lower five-lobed; the second compressed, serrated. Skull elongate; temporal ridges separate behind.

Lemur volans, *Linn.* Galeopithecus volans, *Shaw, Zool.* t. 38. G. variegatus, *Geoff.* G. rufus, *Geoff.* ? G. ternatensis, *Geoff.* G. Temminckii, *Waterh. P. Z. S.* 1838, p. 120. G. undatus, *A. Wagner; Schreb. Säugeth.* i. p. 326, t. 307 *b.* G. Temminckii, *Waterh. Trans. Zool. Soc.*

Hab. Java; Sumatra; Borneo; Siam.

** *Nose of skull short, broader than long. Grinders large. False grinders thick. Gonyx of lower jaw with an acute angle. Teeth overlapping,* Colugo.

2. **Galeopithecus philippinensis.** *The Broad-headed Colugo.* B. M.

The second and third upper grinders higher than broad, conical, rather compressed, with a small dentation on each side; the front upper very small, nicked; the third highest; the first lower toothed; the second conical.

Galeopithecus philippinensis, *Waterh. P. Z. S.* 1838, p. 119; *Trans. Zool. Soc.* ii.

Hab. Philippines.

Total length 20 inches; skull 2 inches 7 lines; five hinder grinders 10 lines long.

2. GALEOLEMUR.

Tail elongate, of 21 vertebræ. Arms elongate.—*Temm.*

Galeolemur, *Lesson.* Galeopithecus, *Temm.*

Galeolemur macrurus.

Galeolemur macrurus, *Lesson.* Galeopithecus macrurus, *Temminck, F. Japon. Mamm.* p. 9.

Hab. Ceylon. Skeleton without head. Mus. Leyden.

Suborder IV. CHIROPTERA.

Limbs and the very elongated fingers of the hands enclosed in a thin skin. Thumb and great toe free.

Fam. VIII. PTEROPIDÆ.

Head conical. Ears simple, lateral; tragus none. Nostrils simple, rather produced. Index finger clawed (except *Cephalotes*). Wings broad, long. Tail short or none. Interfemoral membrane narrow, margining the legs. Thumb elongate, the lower joint short, it and the base of the longer slender; upper joint enclosed in the front membrane of the wing.

Skull elongate. Cutting-teeth $\frac{4}{4}$ or rarely $\frac{2}{4}$; the upper separated from the canines by a space on each side for the reception of the lower canines, and placed in the centre of the intercanine space; lower crowded between the canines, sometimes pressed out by them. Canines elongate. True grinders $\frac{3}{3}$. False grinders $\frac{1}{2}$ or $\frac{2}{3}$; the hinder conical, oblique; the front small, often deciduous; sometimes the upper are wanting.

Hab. The Eastern Hemisphere and its islands.

These Bats are spread over the warmer parts of Africa and Asia, and are found in many of the smaller islands of the Indian and

Pacific Oceans. There is a general similarity in the colouring; and specimens found in the same locality or island often vary considerably from one another, even when examination of the skull and teeth shows that they are one species. On the other hand, specimens from very different localities often resemble one another so much in their external colouring that it is difficult to distinguish them in any description that can be given; but when the skull and teeth are examined, they prove to be very distinct species. Under these circumstances the locality is an important character in determining the species. This observation is applicable to other families of Bats; indeed the species of these animals are so imperfectly known, and the material in the Museums is so imperfect, that the best one can attempt to do is to get what is contained in the Museum into groups, leaving succeeding naturalists to determine if they are species or varieties.

Many of the characters given by Temminck and others as characteristic of the species depend on the art or want of talent of the preserver.

Synopsis of Tribes and Genera.

Section A. *Teeth* 34. *True grinders* $\frac{3}{3}$, *hinder small. False grinders* $\frac{2}{2}$; *front minute, often deciduous.*

Tribe I. Pteropina. *Cutting-teeth* $\frac{4}{4}$; *lower in a regular series. Tail none. Gland of penis bony.*

1. Spectrum. Head round; face narrow. Ears small, hidden. Wings from the sides of the hairy back.
2. Pteropus. Head elongate; face broad. Ears exposed. Wings from the sides of the back. Back hairy.
3. Eunycteris. Head elongate; face broad. Ears exposed. Wings only attached to the vertebral line; the part over the back bald, or nearly so.

Tribe II. Macroglossina. *Cutting-teeth* $\frac{4}{4}$; *lower in a regular series. Tail-end free. Gland of penis fleshy.*

* *Face very long, slender. Cutting-teeth isolated, in an arched series. Grinders compressed, small.*

4. Notopteris. Wings only attached to the vertebral line. Part over the back bald. Head very long; face slender. Tail very long. False grinders none.
5. Macroglossus. Wings from the sides of the hairy back. Head very long; face very slender. Tail short. False grinders $\frac{1}{1}$, compressed.

** *Face broad. Cutting-teeth in a transverse series. Grinders thick.*

6. Xantharpyia. Wings from the sides of the hairy back. Head elongate; face tapering. Grinders far apart in front. Fur short, adpressed.
7. Eleutherura. Wings from the sides of the hairy back. Head elongate; face broad. Grinders close together. Fur soft, spreading.

Tribe III. Cephalotina. *Cutting-teeth* $\frac{2}{2}$; *lower crowded before the base of the canines. Tail-end free. Index finger not clawed.*

8. Cephalotes. Face short. Grinders close; upper false grinder wanting. Upper cutting-teeth broad.

Section B. *Teeth* 28. *True grinders* $\frac{3}{3}$. $\frac{3}{3}$. *False grinders* $\frac{2}{2}$; *front minute, often deciduous. Wings from the sides of the hairy back. Penis-gland fleshy.*

Tribe IV. HARPYIANA. *Cutting-teeth* $\frac{2}{2}$ *or* $\frac{2}{0}$; *lower, when present, crowded before the canines. False grinders* $\frac{3}{3}$. *Head short, broad. Nostrils tubular, diverging.*

9. HARPYIA. Tail short, end free.

Tribe V. CYNOPTERINA. *Cutting-teeth* $\frac{4}{4}$; *lower in a regular series. False grinders* $\frac{3}{3}$. *Head broad, short, tapering. Nostrils rather prominent. Shoulde-rgland with coloured hairs.*

10. CYNOPTERUS. Tail short, end free.

11. MEGÆRA. Tail none.

Tribe VI. EPOMOPHORINA. *Cutting-teeth* $\frac{4}{4}$; *lower in regular series. Front upper false grinders wanting. Head very long, swollen in front. Nostrils rather prominent. Shoulder-gland with white hairs.*

12. HYPSIGNATHUS. Face swollen and truncated in front. Nose and chin with a fleshy disk, with raised edges. Nostrils in the notch in the upper margin of the disk.

13. EPOMOPHORUS. Face very hairy, rounded in front. Nose and chin hairy. Skull elongate, narrow, zygomatic arch flattened. Upper cutting-teeth close, rather crowded together in the centre of the intercanine space; grinders far apart.

14. EPOMOPS. Face rounded in front. Nose and chin hairy. Skull ovate, rather broad. Face moderate. Zygomatic arch curved. Cutting-teeth separate, far apart in the intercanine space; grinders close.

Section A. *Teeth* 34. *True grinders* $\frac{3}{3}$, *hinder small. False grinders* $\frac{2}{3}$, *front minute, often deciduous.*

Tribe I. PTEROPINA.

Cutting-teeth $\frac{4}{4}$; lower series regular. Wings from sides of back (except in *Eunycteris*). Tail none. Penis-gland bony.

1. SPECTRUM.

Head rounded; face produced, slender, cylindrical. Ears small, slender, nearly hidden by the fur. Wings from the sides of the hairy back. Fur soft, abundant, erect. Back, base of the wings near the back, shoulders, hinder side of the forearm, thighs and legs, and interfemoral membrane covered with hair. Thumb, lower joint short, enclosed in the front membrane; upper joint not very long, compressed, quite free. Tail none. Penis-gland bony. Interfemoral membrane very narrow, only distinct near the heel-bone. *Hab.* Africa, Asiatic islands, and Japan.

1. Spectrum vulgare. B. M.

Ears small; fur soft, abundant, spreading, blackish chestnut; head pale yellow; the upper arm, sides of the shoulders, back, and

the rump bright golden yellow; underside of thighs and pubis yellowish.

La Roussette, *Brisson*. La Rossette, *Buffon*, *H. N.* x. t.14. Vespertilio vampyrus, *Schreb.* not *Linn.* Pteropus vulgaris, *Geoff. Ann. Mus.* xv. p. 92; *Temm. Mon.* i. p. 132; ii. p. 74, t. 38 (young).

Hab. Isle of France; Bourbon; Madagascar?

Var. *mauritianum*. Head and back, thighs and upper arm above, straw-colour; back of the head and neck bright yellow red; a broad lozenge-shaped spot between the shoulders, extending a short distance down the back; the throat, chest, and abdomen dark red brown; belly and underside of the upper arm yellow; wings brown. Ears small, narrow. *Hab.* Mauritius. B. M.

Temminck describes the nape as yellow; in the Museum specimen it is only rather yellower brown than the back, and darker than the head.

2. **Spectrum rubricolle.** *The Roussette.* B. M.

Ears small, hidden; wings far apart at base; fur soft, abundant, dark brown; head rather grizzled; belly with some white stiffer hairs intermixed; collar reddish; forearm-bone $3\frac{1}{2}$ inches.

Roussette, *Daub. Mém. Ac. Sc.* 1759, p. 385. Rougette, *Buffon*, *H. N.* x. t. 17. Pteropus rubricollis, *Geoff. Ann. Mus.* xv. p. 93. *Temm. Mon.* i. p. 183, ii. p. 75 (not *Siebold*). P. collaris, *Licht. Doub.* p. 2.

Hab. Cape of Good Hope; Mauritius.

3. **Spectrum dasymallum.** *The Sobaosiki.* B. M.

Ears small; fur soft, erect, dense, woolly. Reddish brown, slightly grizzled; collar broad, pale yellow: head red brown; forearm bone $5\frac{1}{4}$ inches, hairy above two-thirds of its length. No upper false grinder.

Pteropus dasymallus, *Temm. Mon.* i. p. 180, t. 10, t. 15. f. 10, 11; ii. p. 73. P. rubricollis, *Siebold, Faun. Japon.* (not *Geoff.*).

Hab. Japan, *Verraux*.

Skull $2\frac{1}{2}$ inches long, $1\frac{1}{4}$ wide; zygomatic arch thin, high. Grinders large; hinder upper and lower small, oblong, equal-sized; lower false grinder cylindrical, upper wanting. Upper cutting-teeth rather broad, equal. Skull like the typical *Pteropi* in form.

4. **Spectrum anetianum.** B. M.

Fur very long, soft, abundant, dull red brown, varied with yellowish or grey hairs; hair black, with pale ends; upper part of neck bay; a half collar on back of lower part of neck, and shoulders, pale yellow; head black, with interspersed yellow hairs; chest and underside black. Ears narrow; forearms and legs hairy.

Female. Head and underside rather redder.

Hab. New Hebrides: Aneiteum, *Rayner*.

Skull, length $2\frac{1}{4}$, width $1\frac{1}{4}$; nose from orbit 9 lines; the grinders

small; upper subtrigonal; lower smaller, circular; lower false grinder rather large, truncated, with an oblong crown; upper wanting; upper cutting-teeth rather wide. Face shorter and wider than in *P. nawaiensis*, No. 14, from Nawai.

5. **Spectrum leucopterum.** B. M.

Fur very soft, uniform pale whitish brown; underside duller; wings thin, very pale brown, whitish at the tips; the back, shoulders, and nearly the whole length of the forearm with close-pressed hairs; thighs and legs with woolly hair. Forearm 5½ inches.

Pteropus leucopterus, *Temm. Esq.* p. 50.

Hab. Philippines, *Verreaux.*

2. PTEROPUS.

Head elongate; face produced, broad. Ears large, produced, acute. Fur soft, of the back adpressed, of the underside more spreading, fuller. Wings from the sides of the back. Back, shoulders, part of the forearm, and the thighs hairy. Thumb, lower joint short, the upper longer; the lower joint and the base of the upper are enclosed in the front membrane, the rest free. Tail none. Interfemoral membrane moderate, margining the legs and thighs. The gland of the penis armed with a broad bone.

Pteropus, sp., *Brisson, Geoff., Gray, Peters.* Acerodon, *Jourdan, Ann. Sci. Nat.* viii. p. 376.

The wings are generally from the sides of the back; in some species they are extended backwards so as to be attached to the sides of the middle of the back; but in some stuffed specimens the manner in which they are attached is not easily determined, as the skin of the back appears sometimes to be stretched in width. If one had living specimens to examine and could observe their habits, I have no doubt that those with the wings from near the centre of the back would have some habit different from those that have them affixed to the sides of the body; but our system cannot go further than the specimens at our command admit.

The species may be thus divided:—

I. The nape and the back of the neck yellow or red, forming a bright tippet.

* Orbits paler. No. 1.

** Orbits like back. Size large. Nos. 2–7.

*** Orbits like back. Size small. Nos. 8–21.

II. Nape like back; shoulders with a tuft on each. No. 22.

III. The nape and back of the neck like the rest of the body, or only whiter.

* Face uniform. Nos. 23–27.

** Face with brown streaks. No. 28.

*** Face with white streaks. No. 29.

I. *The nape and back of the neck yellow or red, forming a bright tippet.*

* *Orbits paler, forming rings round the eye.*

1. **Pteropus conspicillatus.** *The Spectacled Kalong.* B. M.

Black; orbits brown; nape and back of neck red yellow; hairy part of back rather narrow; upper arms and thighs rather hairy; rest of limbs bald; forearm-bone $6\frac{1}{4}$ inches.

Pteropus conspicillatus, *Gould, P. Z. S.* 1849, p. 109! *Mamm. Austr.* iii. t. 29!

Hab. East coast of Australia: Fitzroy Island. (Malay Islands, *Temm.*)

Var. Underside silvered, with the white tips to the hairs; face browner. *Hab.* East coast of Australia, *Capt. Stanley.* B. M.

Skull large (end imperfect), about $2\frac{3}{4}$ inches in length, 1 inch 7 lines wide; hinder grinders small, roundish, lower smallest; false grinders circular, upper wanting; upper cutting-teeth subequal.

** *Orbits like back. Large-sized Bats.*

2. **Pteropus Edwardsii.** *The African Kalong.* B. M.

Fur soft, nearly uniform; back and legs black; head, neck, and upper part of back orange; face and throat blackish; underside reddish yellow; sides of body and vent blackish-varied; back, thighs, and lower half of forearms hairy, wings very hairy beneath, near elbow.

Great Madagascar Bat, *Edw. Birds*, iv. t. 180. Pteropus Edwardsii, part., *Geoff. Ann. Mus.* xv. p. 92; *Temm. Monog.* ii. p. 61; *Peters, Mossamb.* i. p. 23.

Hab. Africa: Shoa; Mohilla Islands; Comoro group, *Kirk*; Johanna Island, *Livingstone.*

The skull elongate; the false grinders in the upper jaw very small, lower larger; the front grinder in each jaw very high, conical; the canines very long, slender.

M. Temminck says that the specimens from Calcutta, Pondicherry, and Ceylon do not differ from those from Madagascar (Mon. ii. p. 62); but I believe that they are distinct species.

3. **Pteropus medius.** *The Wurbagool.* B. M.

Blackish brown; nape and back of neck yellow; head, throat, chest, and abdomen darker, red or blackish brown.

Pteropus Edwardsii, part., *Geoff. Ann. Mus.* xv. p. 92; *Temm. Monog.* ii. p. 61. P. medius, *Temm. Monog.* i. p. 176. P. leucocephalus, *Hodgs. Journ. As. Soc. Beng.* iv. p. 700! P. edulis, *W. Elliot.* P. Edwardsii, *Waterhouse, P. Z. S.* 1843, p. 67! *Kelaart, Prod.* 27! P. assamensis, *M'Clelland, P. Z. S.* vii. p. 148! P. rubricollis, *M'Clelland.*

Hab. India: Assam, *Minhot*; Nepal, *Hodgson*; Madras, *W. Elliot.*

Varies greatly in the intensity of the colouring. Skull 2 inches 11 lines long, 1 inch 7 lines wide. The teeth as in *P. Kelaartii*, but the group of cutting-teeth is much narrower, and the space occupied by the grinders is rather shorter.

4. Pteropus Kelaartii. *The Ceylon Kalong.* B. M.

Brown; nape and back of neck yellow; the upper cutting-teeth large, broad.

Hab. Ceylon (in the plains), *Capt. J. Stevens.*

The space occupied by the cutting-teeth is considerably (that is to say, about one-fourth) wider than in the skull of Bats from continental India. Externally the two Bats are much alike. Skull 3 inches 2 lines long, and 2 inches 8 lines wide. Grinders large; false grinders of lower jaw large, of upper rudimentary or wanting; upper hinder grinder circular, lower oblong, larger.

See also

a. *Pteropus Dussumieri*, Is. Geoff. Voy. Bélanger, p. 98; Temm. Monog. ii. p. 76. Brown mixed with white; face, throat, neck, and beneath brown; nape and sides of neck fulvous. *Hab.* India. Mus. Paris.

b. *Pteropus edulis*, Péron and Lesueur; Geoff. Ann. du Mus. xv. p. 92; Temm. Mon. i. p. 172, t. 15. f. 1–6, ii. t. 35. f. 1.; *Vespertilio vampyrus*, Linn.; *V. calæno*, Herm. Obs.; *Pteropus javanicus*, Horsf. Java, t. Black; crown, occiput, and nape fulvous-brown. *Hab.* Java; Sumatra; Banda.

5. Pteropus funereus. *The Red-naped Kalong.* B. M.

Dull black; nape and the front of the shoulders dull red brown; belly with interspersed white hairs; arm- and leg-bones nearly naked; ears acute.

Pteropus funereus, *Temm. Monog.* ii. p. 63, t. 35. f. 4; *Gould, Mamm. Aust.* iii. t. 30. P. edulis junior, *Tomes, P. Z. S.* 1858, p. 337.

Hab. Australia: Port Essington, *Gilbert*; N. E. Australia, *Elsey*, Celebes, from the *Leyden Museum*; Goda Island, Hewitt's group, *Rayner.*

Skull very like that of *P. medius*, but narrower; the upper cutting-teeth moderate; length 2″ 5‴, breadth 1″ 2‴.

6. Pteropus poliocephalus. *The Grey-headed Kalong.* B. M.

Fur of back close-pressed, greyish black; nape, neck, and sides of the body reddish yellow; head, chest, and middle of the belly greyish-brown-grizzled; wings from sides of back, far apart; lower part of forearms slightly hairy.

Pteropus poliocephalus, *Temm. Monog.* i. p. 179, ii. p. 66; *Gould, Mamm. Aust.* iii. t. 28!

Hab. Australia: River Clarence, *Gould*; Cape Upstart, *Macgillivray*.

Var. Head and neck of male reddish black; chest and belly paler, or dark red brown; female, head greyish black. *Hab.* North Australia, *Elsey*, 1856.

See also *Pteropus scapulatus*, Peters, Ann. & Mag. N. H. 1863, xi. p. 231; Gould, Introd. Mamm. Aust. p. 47. Two humeral spots of golden-yellow hair, and on the underside of the wing-membranes an abundance of woolly hair of the same colour. *Hab.* Cape York, *Peters*. Size of *P. medius*.

7. **Pteropus jubatus.** *The Maned Kalong.* B. M.

Blackish brown; back slightly grizzled beneath with many interspersed white hairs; crown of the head, occiput, and nape pale brown (or reddish); sides of neck red; face, the upper part of the shoulders, and back black; length of forearm-bone $7\frac{1}{2}$ inches.

Pteropus jubatus, *Esch. Zool. Atlas*, t. 16; *Blainv. Ostéog. Cheirop.* t. 1, 2 (skeleton); *Waterh. P. Z. S.* 1843, p. 67; *Temm. Monog.* ii. p. 59. P. pyrrhocephalus, *Meyen, N. A. N. Cur.* xvi. p. 604, t. 45, t. 46. f. 1. Acerodon, *Jourdan*; *F. Cuv. Ann. Sci. Nat.* xii. p. 378. P. Macklotii, *Mus. Zool. Soc.*

Hab. Philippines, *Cuming*. Stuffed adult, and an adult and a young specimen in spirit, from Mr. Cuming.

Skull, brain-case swollen like that of *P. medius*, and with the space of the upper cutting-teeth rather narrow. Length nearly 2 inches (end imperfect), width 1″ 8‴; hinder grinders small, subequal; orbits nearly complete.

*** *Orbits like back. Smaller Bats.*

8. **Pteropus mysolensis.** *The Mysol Kalong.* B. M.

Black; fur of back short, close, of underside long, crisp, and with interspersed long white hairs; back of crown, nape, sides of neck, and front of shoulders bright red yellow; head black; wings black, from the sides of the back, wide apart at the base.

Hab. Island of Mysol, *Wallace*; Ternate, *Wallace*.

Var. *ceramensis*. Head black to behind the ear; the nape and back of neck pale yellow, with only darker tips to the hairs. *Hab.* Ceram, *Wallace*. Like *P. keraudrenius*; but the wings are wide apart on the back, and the nape is orange to the shoulders.

9. **Pteropus ornatus.** B. M.

Fur very soft, abundant, long; back and legs to base of toes covered with long hairs; shoulders and forearms with shorter adpressed

hairs; fur dark reddish brown, with a few pale hairs intermixed; nape and back of neck pale yellow, redder on the sides; face, including orbits, pale grey brown; arm-bone 5 inches.

"Pteropus rubricollis, *Leiths, Journ. Mém. Soc. Imp. Cherb. Verreaux.*"

Hab. New Caledonia (said to be half-grown).

The face is very long; the wings are attached far back towards the middle of the back, being about $\frac{3}{4}$ of an inch apart on the back.

10. Pteropus Floresii. B. M.

Head, nape, and shoulders pale yellowish grey; sides of neck darker yellow; chin, cheeks, and underside of body blackish brown from the dark colour of the lower part of the hairs; back with short, soft, close-pressed pale-brown hairs; head large; nose thick; forearm $5\frac{1}{4}$ inches; lower false grinders large, truncated, circular; upper wanting.

Hab. Flores, *Wallace.*

Something like *P. griseus*, but head much larger and thicker.

11. Pteropus loochoensis. B. M.

Black, with a few interspersed white hairs; nape and back, and the sides of the neck, reddish yellow, paler near the shoulders; head and throat blackish brown; face and crown brownish-washed; forearms and legs bald; hairy part of back narrow.

Hab. Loochoo, *Warwick.*

Var. Black, with more white hairs; nape and neck dirty white; head browner; underpart of the head and temples blackish; hairy part of back narrow. *Hab.* Loochoo, *Warwick.*

The yellow-naped variety is very like *P. keraudrenius*, but the skull is very different.

Skull. Length 2 inches 4 lines, width 1 inch 5 lines. The hinder grinders oblong; the upper rather the larger. Lower false grinders moderate, circular; upper rudimentary, conical. Cutting-teeth rather broad.

12. Pteropus argentatus. *The Silver Kalong.* B. M.

Black brown; back minutely grizzled; underside with some longer silver-tipped hairs; head slightly yellow-washed, especially on temples and orbits; sides of the forehead, nape, and back of the neck bright golden yellow; forearm-bone $4\frac{1}{2}$ inches.

Pteropus argentatus, *Gray, List Mamm. B. M.* p. 194; *Zool. Sulphur*, p. 30, not *Ann. Nat. Hist.*

Hab. Amboyna? Island of Gobie; New Guinea.

13. Pteropus caniceps. B. M.

Fur of back blackish grey from the abundance of grey interspersed hairs, especially on the hinder parts; head grey, with a few interspersed black hairs; broad collar round neck, and over sides of the chest and shoulders, reddish grey; middle of throat and below silver grey; thighs and forearms with a few silvery hairs on the lower half.

Hab. Batchian, *Wallace.*

Like *P. hypomelas*, but back black.

14. Pteropus nawaiensis. B. M.

Fur of back soft, adpressed, blackish grey; head, nape, and upper part of shoulders yellow-white, the middle part rather redder, forming a badly-defined half collar; cheeks dark grey; chin, throat, chest, and underpart of the body blackish; crown with interspersed longer, slender, yellow and greyish hairs; thighs and legs hairy.

Hab. Fiji Islands: Nauai, *Rayner.*

Var. Male, underparts pale reddish brown. *Hab.* Viti Islands: Ovalau, *Rayner.*

Skull.—Length 2 inches 4 lines; nose from orbit $10\frac{1}{2}$ lines, slender; orbits incomplete; upper hinder grinder oblong; lower smaller, circular; lower false grinder moderate, upper wanting.

15. Pteropus flavicollis. B. M.

Brownish black; head and throat blackish; crown, nape, and sides of throat yellow; upper and forearm and legs naked above; fur soft, moderately long; wings attached far back, near the middle of the back; face moderate.

Hab. Fiji Islands: Moala and Totoya; Ovalau, *Rayner.*

16. Pteropus Geddiei. B. M.

Fur black; head to the ears black; nape reddish yellow; throat black.

Pteropus Geddiei, *Macgillivray, MS.* B. M.

Hab. New Hebrides: Aneiteum, *Macgillivray.*

See also

a. *Pteropus keraudren*, Quoy & Gaim. Voy. Uran. i. p. 51, t. 3, 1824; *P. keraudrenius*, Temm. Mon. i. p. 186, t. 15. f. 7, p. 777; *P. marianus*, Desm. Mamm. p. 347. *Hab.* Ladrones: Island of Guan. The figure is very like the preceding; but there are several species so coloured.

b. *Pteropus tonganus*, Quoy & Gaimard, Astrol, p. 74, t. 8, 1833. From Tonga.

c. *Pteropus vanicorensis*, Quoy & Gaimard (Voy. Astrol. p. 74,

t. 9) Blainv. (Ostéogr. Cheirop. t. 6, skull), from Vanikoro, appears to be the same as the latter variety. Quoy figures a variety all pale reddish brown, from Tonga. Temminck, Mon. ii. p. 797, says that the skull of *P. vanikorensis* is three lines and a half shorter than that of *P. keraudrenius*. If this is the case in these two, probably similar differences will be found in the skulls of the specimens from the other islands; but this must be left for future study.

d. *Pteropus insularis*, Voy. Pôle Sud.

17. Pteropus affinis. B. M.

Fur of the back soft, adpressed, black, slightly washed with grey from the interspersed silvery grey hairs; head, neck, front of shoulders, and chest rufous; nose, cheek, and chin blackish; crown slightly greyed with silver hairs; chest and beneath black grey, with abundance of elongated silvery-grey long hairs; thighs and legs hairy above.

Hab. Jilolo, *Wallace.*

18. Pteropus tricolor. B. M.

Fur of back black; head pale-brownish white; cheeks blackish grey; neck, front of shoulders, and chest fulvous; middle of the chest and belly paler fulvous; sides of the body and underside of legs black brown; chin blackish-washed.

Hab. Ternate, *Wallace.*

19. Pteropus Rayneri. B. M.

Fur of the back short, adpressed, brownish black; head, neck, upper part of shoulders, and chest red bay; throat darker; nose and forehead blackish silver grey; cheeks blacker; middle of the chest and belly black; sides and vent brown.

Male. Rump and thighs above reddish brown; head greyer.

Female. Rump and thighs above yellow; head blacker.

Young. All the colours duller; back brown and russet brown.

Hab. Solomon Islands: San Christoval; Guadalcanar, *Rayner.*

20. Pteropus Elseyi. B. M.

Fur short, close, uniform reddish brown; head paler, duller; neck, upper part of shoulders, and chest bright pale red bay; underside reddish bay; sides of the body and near shoulders pale yellowish.

Young. Back black, grey-washed; belly black; crown and neck bay; head blackish grey.

Hab. North-east coast of Australia; Claremont Island, *J. Macgillivray*, 1860; North Australia, *Dr. J. R. Elsey.*

21. Pteropus vitiensis. B. M.

Fur of back blackish brown, reddish-washed, especially on the sides; crown, nape, and shoulders yellow, redder in the middle portion, forming a broad undefined collar; throat, chest, and underside dark brown, reddish-washed and pale-grizzled; face and cheeks blackish, grey-grizzled; underside of head blacker.

Hab. Viti Islands: island of Ovalau, *Rayner*.

See also

a. *Pteropus chrysoproctus*, Temm. Mon. ii. p. 67, t. 25. f. 2 (head), t. 36. f. 7, 8 (skull). Fur of back silky, of underside long and rough; head, neck, chest, and shoulders bright golden red; back to the loins blackish chestnut; loins, rump, and thighs dark chestnut; orbits and chin chestnut-brown; arm-bone 6 inches. *Hab.* Amboina, *Macklot*. Mus. Leyden.

b. *P. Alecton*, Temm. Mon. ii. p. 78; Esq. Zool. Guinea, p. 58. *P. aterrimus*, Temm. Consp. deel i. p. 333. Black; nape dull bay. *Hab.* Minado; Bewdan (not Java); Celebes.

c. *P. Pluto*, Temm. Esq. p. 58. Fur of underside long, rigid, curled, of upper surface smooth and shorter, black, with some scattered yellow hairs; nape dark reddish brown; membrane black; forearm 8 inches. *Hab.* Island of Bali and Lombock.

d. *P. vociferus*, Peale, U. S. Explor. Exped. p. 19, t. 1, 1848. Dark brown; head, neck, and belly brownish red; middle of wing grey; nose elongate, slender. *Hab.* Mangsi Island.

e. *P. samoensis*, Peale, U. S. Explor. Exped. p. 20, t. 2. Bay brown; nape red; head short and strong, fulvous; forehead grey; forearm $5\frac{2}{5}$ inches. *Hab.* Samoi.

II. *Nape like back, shoulders with a spot on each side.*

22. Pteropus Livingstonii. B. M.

Uniform deep black above and below, with a few longer white hairs interspersed, especially on the underside, and most abundant on the rump, with a small roundish tuft of yellow hairs on the back over each shoulder; wings black; back, shoulders from the base of the forearm, and the legs hairy.

Pteropus Livingstonii, *Gray, P. Z. S.* 1866.

Hab. Africa: Johanna Island.

See *Pteropus molossinus*, Temm. Esq. p. 62, note. Fur soft, cottony; head short; nose blunt; ears narrow, short; tuft of unctuous hair on each side of the neck; hind legs quite naked; membrane rudimentary; breast black brown, yellowish-washed; back yellowish brown; wings black. *Hab.* ——— ? Mus. Leyden.

III. *Fur nearly uniform in colour; nape like back.*

* *Face uniform.*

23. Pselaphon ursinus. *The Hairy-footed Kalong.* B. M.

Fur soft, rather adpressed, blackish brown; below with interspersed white hairs, rather redder; face black; feet hairy.

Pteropus pselaphon, *Lay. Zool. Journ.* iv. p. 457; *Richards. Beechey's Voy.* ii. t. 2; *Temm. Monog.* ii. t. 37, t. 36. f. 9, 10, 11. P. ursinus, *Kittlitz.*

Hab. Island of Bonin (Loo Choo), *Lay.* In a bad state.

Bone at end of penis small; wings, with the base of the toes, covered with hairs; back, shoulders, lower half of arms, thighs, legs, and feet hairy. Skull typical; orbits incomplete; the group of upper cutting-teeth rather narrow: length 2 inches 8 lines, width 1½ inch: hinder upper grinders oblong, moderate; lower smaller; false grinder in lower jaw moderate, wanting above.

24. Pteropus Macklotii. B. M.

Fur short, close, uniform pale bay, with a more or less distinct broad yellow half collar; chest, and upper base of wing, pale.

Pteropus Macklotii, *Temm. Mon.* ii. t. 35. f. 5, t. 36. f. 4–6.

Hab. Timor, *from Mus. Leyden.*

Var. *batchiana.* Back and beneath reddish, with a few interspersed whitish hairs; penis-bone large, broad. *Hab.* Batchian, *Wallace.*

Var.? Greyer; a male. *Hab.* Sonda Islands: Lombock, *Wallace.*

25. Pteropus hypomelas. B. M.

Fur brownish white; head pale brown; shoulders and broad collar round neck of longer spreading hairs dark red brown; underside of body pale yellow brown, paler behind; cheeks and upper part of throat dusky; hairy part of back narrow behind; upper and forearm and the legs bald; forearm 6¾ inches.

Pteropus argentatus, *Gray, P. Z. S.* 1858, p. 107, not *Zool. Sulphur.* P. hypomelas, *Temm. Esq.* p. 61.

Hab. Aru Island, *Wallace* (Ternate, *Temm.*).

26. Pteropus griseus. B. M.

Fur rather short, close, nearly uniform pale whitish brown; hairy part of back narrow; lower part of arm with sparse, close-pressed hairs.

Male. Back redder brown; throat with a pale fulvous half collar.

Female. All over uniform pale whitish brown, rather darker beneath; forearm 3¾ inches.

Pteropus griseus, *Geoff. Ann. Mus.* xv. p. 94, t. 6; *Temm. Mon.* i. p. 187, t. 11; ii. p. 81, t. 35. f. 6, t. 36. f. 12, 15.

Hab. Timor, *Mus. Leyden.*

Skull, length 1 inch 11 lines, width 13 lines; face rather attenuated. The upper false grinder rudimentary, acute; lower moderate, truncate, cylindrical. Hinder grinders small, truncated; the upper subtrigonal, largest; the lower subcircular.

See also *Temm. Mon.* t. 36. f. 16, 17.

27. **Pteropus chinensis.** B. M.

Fur uniform pale brownish white, of the neck and shoulders rather spreading, of the back short, rather close-pressed; cheek, throat, and underside of body rather darker; of rump, vent, and thighs rather redder; the lower half of forearm with long close-pressed hairs; wings pale brown, outer upper edge and tip whitish; head large; nose rather elongate.

Hab. China, *Fortune.*

Like *P. leucopterus*, but fur very different and face broader.

** *Face with brown streaks.*

28. **Pteropus personatus.** B. M.

Fur rather short, close, uniform pale whitish brown; chest and middle of back darker; face white, with a dark-brown streak from nose to eye, extending up the forehead to meet a collar round the upper part of the throat; back, shoulders, lower part of upper arm, thighs, and legs hairy; forearm-bone $3\frac{1}{2}$ inches.

Pteropus personatus, *Temm. Mon.* i. p. 189; ii. p. 82; *Gray, P. Z. S.* 1866, fig.

Hab. Ternate, *Wallace.*

Skull 1 inch 10 lines long, 1 inch 1 line broad at the zygomatic arch; the lower surface much arched. The hinder upper grinders very small, deciduous; the two hinder lower small; the last very small, cylindrical. The front false grinder near the canines, with a space between it and the first grinder; the lower moderate, the upper very small.

*** *Face with white streaks.*

29. **Pteropus Wallacei.** *The Black-faced Kalong.* B. M.

Fur very soft, reddish grey brown; hair of the back ashy black, of the belly ashy, with red tips; the nape and side of the shoulders greyer; a broad band along the upper lip, a spot on cheek at angle of mouth, a streak up the centre of the nose (which are each edged with darker brown), the back, the chin, and a lanceolate spot over

each eye white; the hair on the upper side of the upper arm greyish white; ears prominent, bald, with two impressed longitudinal grooves.

Pteropus Wallacei, *Gray, P. Z. S.* 1866, fig. of head.

Hab. Macassar, *Wallace*, 1857.

A small species; but the specimen is very young.

Fig. 21.

A.

B.

A, *P. Wallacei.* B, *P. personatus.*

3. EUNYCTERIS.

Wings attached to the middle of the back, bald behind, except a narrow streak down the middle of the back, which is covered with soft adpressed hairs, falling off in the older animals. Shoulders, arms, and legs and toes bald. Index finger clawed. Thumb, lower joint short, enclosed; upper joint very long, free. Interfemoral hairy above, narrow. Tail none. Cutting-teeth $\frac{4}{4}$, in a regular series. Grinders $\frac{3}{3}$. False grinders $\frac{2}{3}$; lower distinct.

Temminck observes, "*P. pallidus*, *P. phaiops*, and *P. griseus* are remarkable in the genus for the small extent of the adhesion of the wings to the back, which does not exceed the width of 3 or 4 lines. This allies them to *Cephalotes*, but in that genus the wings are only attached to the back by a rudimentary membrane." *Mon.* ii. p. 77.

Eunycteris phaiops. *The Phaiops.* B. M.

Black; head and neck bright dark-red bay; cheeks, chest, and underside reddish black. Cutting-teeth distinct, not crowded. A male.

Pteropus phaiops, *Temm. Mon.* i. p. 178; ii. t. 35. f. 3, t. 36. f. 123 (skull).

Hab. Hatubello Island, *Wallace*; Java, *Bowring*.

Var. (female). Smaller than male; throat and chest much darker red brown; chest and belly brighter, paler, like nape; underside of upper arms blackish. B. M.

Hab. Goram, *Wallace*.

Var. (female). Larger than male; throat and chest dark red brown like former; chest and belly pale reddish yellow, paler in the middle of the abdomen; underside of upper arm blackish. B. M.

Hab. Bouru, *Wallace* (with young suckling); Ceram, *Verreaux* (female). Also found, according to Temminck, in Macassar, Celebes, and Amboina.

Skull. Hinder grinder oblong, small; the lower false grinder as large as hinder grinder, upper wanting; in other respects like typical *Pteropi*. Length about $3\frac{1}{2}$ inches, width $2\frac{1}{4}$ inches.

Temminck describes the lower cutting-teeth as crowded between the canines in the adult. In all the Museum specimens they are regular.

See *Pteropus pallidus*, Temm. Mon. i. p. 184, t. 15. f. 8, 9; ii. p. 77, skull. Fur very short, brown, with intermixed ash-grey and white hairs; ears small, rounded at the end. There are no small anterior false grinders in the upper jaw; arm-bone $4\frac{1}{2}$ inches; nape, shoulders, and collar bright red; wings pale. *Hab.* Banda. Very common in Sumatra and Molucca, *Temm.* Mus. Leyden and Paris.

Tribe II. MACROGLOSSINA.

Cutting-teeth $\frac{4}{4}$, lower in a regular series between the canines. Tail-end free. Gland of penis fleshy.

A. *Face very long, slender. Cutting-teeth isolated, in an arched series. Grinders much compressed.*

a. *Wings from middle of the back. Tail elongate.*

4. NOTOPTERIS.

Head elongate. Muzzle produced, subcylindrical. Nose simple. Muffle narrow, bald between the nostrils, with a deep central notch. Ears small, lateral. Body covered with short crisp hair. Wings broad, short, arising from the middle of the back. Side edge arched, in towards the middle of the back. Middle of the back bald; shoulders and rump hairy. Thumb elongate; lower joint half the length of the upper, and enclosed in a narrow membrane. Index finger of three bony joints; the last joint short, clawed. Interfemoral membrane deeply cut out, margining the hind legs to the heel, hairy above and on the underside near the body, bald at other part. Tail elongate, slender, tapering, many-jointed, arising from, and with the base attached to, the underside of the narrow interfemoral membrane, as long as the hind legs.

Notopteris, *Gray, P. Z. S.* 1859, p. 36, t. 67.

Notopteris Macdonaldii. B. M.

Dusky brown, rather paler beneath.

Notopteris Macdonaldii, *Gray, P. Z. S.* 1859, p. 38, pl. 67; *Ann. & Mag. N. H.* 1859, iv. p. 309.

Hab. Feejee Islands (Viti).

Skull elongate; the upper cutting-teeth small, far apart; intermaxillary bones arched, produced on each side; the lower larger, near the base of the canines; canines long, compressed, trihedral; grinders small, much compressed, elongate, narrow, forming a continued series, the hinder one in each jaw oblong, of the same shape but rather smaller than the penultimate; false grinders $\frac{1}{2}$; the lower jaw very slender, wide behind, the branches regularly diverging. Skull somewhat like that of *Macroglossus* (see Blainv. Os. Cheir. t. 6); but it has an additional compressed false grinder in each jaw.

b. *Wings from sides. Tail very short.*

5. MACROGLOSSUS.

Head elongate. Muzzle slender, conical. Tongue exsertile, smooth, elongate. Ears conical, prominent. Wings from the sides of the back, attached on the back of the feet to the base of the toes. Lower joints of the thumb elongate, enclosed in a broad membrane; upper longer. Tail scarcely visible, very short. Back, upperside of arms and legs, and interfemoral membrane hairy.

Macroglossus, *F. Cuv.* Macroglossa, *Lesson; Fischer.*

Skull elongate; face much elongated, very slender; lower jawbone weak. Grinders $\frac{4}{5}$, small, compressed. Cutting-teeth $\frac{4}{4}$. False grinders $\frac{1}{1}$, compressed. Canines slender.

Macroglossus minimus. *The Kiodote.* B. M.

Macroglossus minimus, *Gray, Mag. Z. & B.; Temm. Mon.* ii. p. 98. Pteropus minimus, *Geoff. Ann. Mus.* xv. p. 535. P. rostratus, *Horsf. Z. Java*, t.; *Temm. Monog.* i. p. 191, t. 15. f. 25, 30, t. 16. f. 1, 2. Macroglossa Kiodotes, *Lesson.* M. Horsfieldii, *Lesson.* Kiodote, *Mamm. Lith.* t.

Hab. Java, *Hardwicke.*

Var. Smaller, darker. *Hab.* Mysol Island, *Wallace*; Philippine Islands, *Cuming.*

Temminck observes that "the specimens from the different islands vary in the shade of colour, and in the length and slenderness of the face of the skull."—*Temm. Mon.* ii. p. 97.

B. *Face broad, moderate. Cutting-teeth in a continued transverse series. Grinders oblong, thick.*

6. XANTHARPYIA.

Tail short, on the underside of the short interfemoral membrane, free at the end. Face elongate, rather slender. Lower jaw slender. Grinders rather far apart in front. Ears elongate. Fur short, closely adpressed. Neck of male with a gland and radiating hairs on each side. Wings from the sides of the back. Back of limbs hairy. Wings to the base of the toes. The great blood-vessel from the armpit and the groin simple, until it nearly reaches the margin of the wing. Thumb elongate; lower joint moderate, enclosed; upper joint much longer, free, Index finger clawed. Interfemoral membrane with a band on each side from the tail to the heel. Cutting-teeth $\frac{4}{4}$. Canine elongate. True grinders $\frac{3}{3}$, hinder small; false grinders $\frac{2}{3}$, rather far apart.

Xantharpyia, *Gray, List Mamm. B. M.* 1843; *Voy. Sulph.* 1854. Cynonycteris (part.), *Peters, Mossamb.; Wagner.* Pachysoma (part.), *Tomes.* ? Pterocyon, *Peters, Monats. Preuss. Akad. Berlin*, 1865, p. 256.

* *Head very slender, elongate. Fur very sparse and short, especially on the back. Arm-bone nearly bald.* Senonycteris.

1. Xantharpyia seminuda. B. M.

Fur of back chestnut-brown; head, neck, shoulders, and upper part of chest white; chest and belly paler brown. Fur of back soft, of underpart very thin; upper joint of thumb rather longer than the lower. Arm-bone $3\frac{1}{4}$ inches.

Pteropus seminudus, *Kelaart, MS. B. M.*! P. Leschenaultii, *Kelaart, Prod. Ceylon*, p. 27 (not *Geoffroy*).

Hab. Ceylon, (in spirit) *Thwaites.*

See *Pteropus Leschenaultii*, Desm. Temm. Mon. ii. p. 86. Grey

brown; beneath fulvous ashy; wings with series of white spots; face very short. *Hab.* Pondicherry; Calcutta, *Roux*. Perhaps adult of former. Mus. Paris.

** *Head elongate, attenuated. Fur close-pressed, soft. Arm-bone very hairy. Neck of male with gland and half-collar of long unctuous hairs.* Xantharpyia.

2. Xantharpyia straminea. B. M.

Pale brown, yellower on the loins; head darker; throat of the male with a broad reddish-yellow half-collar.

Pteropus stramineus, *Geoff. Ann. Mus.* xv. p. 95; *Temm. Mon.* i. p. 196, t. 15. f. 12, 13 (skull), ii. p. 84; *Sundevall, Stock. Vet. Acad. Hand.* 1842, p. 206. Xantharpyia straminea, *Gray, List Mamm. B. M.* Pachysoma stramineum, *Tomes, P. Z. S.* 1860, pp. 44, 55; *ib.* 1861, t. 1. f. 6? ? Pterocyon paleaceum, *Peters, Monats. Akad. Berl.* 1865.

Hab. Africa: Egypt; Senegal, *Mus. Leyden*; Sennaar, *Botta*; Guinea, *Pet.*; Gambia, *Rendall*; Sierra Leone, *Strachan* (in spirit).

Skull (length above 2 inches) imperfect; hinder grinder roundish, the upper rather the largest; false grinders conical, acute, upper small, near the canines. The scrotum very large, naked, wrinkled and rough, as large as two hazel nuts.

Geoffroy and Temminck described the species from some specimens which were said to have been brought by Péron from Timor; but M. Temminck, though in his first volume he declared the Timor habitat "certain," in the second volume considers that he and Geoffroy were misled, and that Sennaar and Senegal are the proper habitats; but Dr. Peters seems to believe that there is a Timor and an African species.

See *Pteropus stramineus*, Geoff. Ann. du Mus. xv. p. 45; Temm. Monog. i. t. 15. f. 13 (skull); Blainv. Ostéogr. Cheirop. t. 6 (skull from Timor); Tomes, P. Z. S. 1861, t. 1. f. 6.

Hab. Timor, *Péron*.

Dr. Peters says this is different from the *P. stramineus*, Temm. Monog. ii. from Africa.

Temminck's description of the specimen in Paris, said to be brought by Péron from Timor, agrees with the African specimens of this animal. M. Temminck gives Timor as the "patrie certaine," in vol. i. p. 195; but in vol. ii. p. 84 he says he was misled, and that it inhabits Sennaar and Senegal.

7. ELEUTHERURA.

Tail short, on underside of short interfemoral membrane, free at the end. Face moderate, broad. Lower jaw strong. Grinders close together. Ears elongate. Neck of the male with a gland covered with radiating hairs on each side. Cutting-teeth $\frac{4}{4}$. Canines elon-

gate. Grinders $\frac{3}{3}$; false grinders $\frac{2}{3}$, the front upper small, conical, lower larger. Wings from the sides of the back. Back to the origin of the wings, the shoulders, back of the forearms and the thighs, and the back of the legs hairy. Wings to the base of the toes. Thumb, lower joint moderate, enclosed in the membrane; upper joint much larger, slender, free. Index finger clawed. Interfemoral membrane with a more or less distinct band on each side from base of tail to heel. The great blood-vessel from the armpit and groin simple until it nearly reaches the margin of the wing.

Eleutherura, *Gray, Voy. Sulph.* p. 29, 1854. Cynonycteris (part.), *Peters, Mossamb.*; *Wagner.* Pachysoma, part., *Tomes.*

The fur at the back of the neck and withers converging and forming an indistinct narrow crest. The toes strong, compressed. Heel-bone short, strong.

1. Eleutherura ægyptiaca. B. M.

Fur dull grey brown; back rather narrow, slightly arched in on the sides; belly and hair on underside of wings ashy; forearm-bone $3\frac{1}{2}$ inches.

Pteropus ægyptiacus, *Geoff. Ann. Mus.* xv. p. 96. Pachysoma ægyptiacum, *Tomes, P. Z. S.* 1860, p. 56. Pteropus Geoffroyii, *Temm. Monog.* i. p. 197, t. 15. f. 14, 15 (skull), ii. p. 85, t. 36. f. 16. Xantharpyia ægyptiaca, *Gray, List Mamm. B. M.*

Hab. North Africa: Egypt, *Burton, Christie*; Abyssinia, *Harris.* "West Africa, Senegal," *Temm.*

Length of skull $1\frac{3}{4}$ inch. The fourth or last upper grinder square, moderate-sized; last lower smaller, oblong; the lower front false grinder thick, strong; upper cylindrical. Penis-gland soft; scrotum large, bald, rugose.

2. Eleutherura unicolor. B. M.

Fur soft, uniform grey brown, rather paler below; hair one-coloured; ears large; wings pale, with white hairs near margin; forearm 3 inches 8 lines; tail very short; false grinders in each jaw well developed, lower largest.

Hab. West Africa: Gaboon, *Verreaux.*

See *Pteropus mollipilosus*, Allen, Proc. Acad. N. Sci. Philad. 1861, p. 159. Head small; ears large; tail very small, free; fur olive-brown, brighter on the back of the neck. *Hab.* Western Africa (Gaboon), *Du Chaillu.* "The intermaxillary bone of the skull is not thrown forwards and downwards as in other *Pteropi*, but is on the same level as the roof of the mouth, the first upper premolar larger than the incisors, the same tooth of lower of a good size and less tubercular than in other species."—*Allen.* Perhaps male of preceding.

3. Eleutherura collaris. B. M.

Dull brown; head darker; underside greyer, from the grey ends of the hairs; fur on under surface of wing brownish; the lower part of the upper thumb-joint enclosed in the membrane; forearm-bone 3⅓ inches; skull, length 1 inch 7 lines; the upper hinder grinder square, rather small, lower oblong, narrow; the front lower false grinder thick, upper very small, slender; the palate more arched than in *E. ægyptiaca*.

Pteropus Leachii, *A. Smith, Zool. Journ.* iv. p. 433; *Ill. Z. S. Africa*, t. p. 48; *Temm. Monog.* ii. p. 89. P. amplexicaudatus (part.), *Temm. Mon.* i. p. 160. Var. greyer, P. hottentotus, *Temm. Mon.* ii. p. 87, t. 36. f. 16, 17 (skull). Eleutherura hottentota, *Gray, Zool. Sulph.* p. 29. P. collaris, *Licht. Doubl.; Ill. Abh. Berl. Akad.* 1815, p. 84. Cynonycteris collaris, *Peters, Mossamb.* p. 25.

Hab. South Africa: Cape of Good Hope, *Brandt*; Natal, *Verreaux*.

4. Eleutherura marginata. B. M.

Dull brown, rather paler below; the hairy part of the back narrow, rather arched on the sides.

Vespertilio marginatus, *Buchanan Hamilton.* Pteropus titthæcheilus, *Temm. Monog.* P. pyrivorus, *Hodgs. P. Z. S.* 1836, p. 46 (B. M.). Cynopterus marginatus, *Gray, List Mamm. B. M.* C. horsfieldii, *Gerrard, Cat. Bones B. M.* p. 58.

Hab. India, *Buchanan Hamilton*; Nepal, *Boys, Hodgson, Strickland*.

The grinders $\frac{4}{5}$: the hinder upper stout, about two-thirds the size of the preceding one; the hinder lower rather larger, oblong, longer. The front lower false grinder larger, compressed, with a triangular crown; the upper very small, cylindrical. Lower grinders very close together, forming a continued line.

This Bat differs from the *Cynopteri* from India, with which it has been usually confounded, in the wings being bald above, near the back, and only hairy on the shoulders and lower half of the upper-arm, and also in being larger; the legs are bald.

5. Eleutherura fuliginosa. B. M.

Sooty brown; the underside rather greyer, from the small grey tips of the hairs; sides of the throat with two large radiating patches; hands dark-coloured to the base.

Hab. Siam: Loa Mountains, *Mouhot*.

6. Eleutherura infumata. B. M.

Fur of back blackish brown, greyish-washed; neck yellower; underside greyer; front of chest slightly washed with reddish brown. Length of forearm-bone 3¼ inches.

Hab. Flores, *Wallace*.

7. Eleutherura fusca. B. M.

Fur pale red brown; crown of head rather dark, neck yellower, chin and underside duller. Forearm-bone nearly 3 inches.

Hab. India? *Parzudaki.*

Much brighter and redder than the other species.

8. Eleutherura philippinensis. B. M.

Fur blackish brown; the neck and chest paler, with a large tuft of bright-yellow-brown hair on each side of the neck; underside rather greyer; hairy part of the back narrow, not so wide as the body; shoulder and lower part of forearm hairy; legs bald.

Hab. Philippine Islands: Manilla, *Gould.*

The hair on each side of the neck radiating and converging to form a ridge on the centre of the back of the neck. Upper joint of thumb nearly free.

See *Pteropus amplexicaudatus*, Geoff. Ann. Mus. xv. p. 96; Temm. Mon. i. p. 200, t. 13. p. 260, ii. t. 36. f. 18, 19. *Pachysoma amplexicaudatum*, Tomes, P. Z. S. 1860, p. 56. Above brown, beneath ashy; tail very short; arm-bone 3 inches.

Hab. Timor. Mus. Leyden.

Tribe III. CEPHALOTINA.

Cutting-teeth $\frac{2}{2}$, lower crowded before the canines. Tail-end free. Wings from the vertebral line. Claw of index finger rudimentary.

8. CEPHALOTES.

Head short and broad. "Wings from the centre of the back, bald over the back. Index finger without any well developed claw; but the end of the bone is curved upwards and rather produced, resembling a claw. Thumb, lower joint short, upper very long; the lower one and the base of the upper one enclosed in the front membrane of the wing. Interfemoral membrane with a muscular band on each side of the tail to the heel. Tail short, enclosed at the base, rudimentary, flattened, of 4 or 5 very short joints. Cutting-teeth $\frac{2}{2}$, close together, the upper ones chisel-shaped, the lower rather conical, entirely filling up the very narrow space between the base of the large canines."—*Gray*, *Proc. Zool. Soc.* 1859, p. 38. Grinders $\frac{4}{6}$; no upper false grinders in front; lower, small, deciduous.

Cephalotes, *Geoff.*; *F. Cuv.*; *Temm. Mon.* ii. 103. Hypoderma, *I. Geoff.*

Cephalotes Peronii. B. M.

Blackish brown, head blacker; underside rather paler, reddish.

Cephalotes Peronii, *Geoff. Ann. du Mus.* xv. p. 104, t. 7; *Temm. Mon.* ii. p. 106, t. 35. f. 7; *Gray, P. Z. S.* 1859, p. 38. Hypoderma Pallasii, *Is. Geoff. Dict. Class. H. Nat.* xv. H. moluccensis, *Quoy & Gaim. Voy. Astrol.* p. 186, t. 2. ANAT. (Junior) Pteropus palliatus, *Geoff. Ann. Mus.* xv. p. 99.

Hab. Timor; Amboyna. B. M.

Lips at the angle of the mouth wrinkled, with a series of short beards on the inner edge. Skull broad, 2 inches 2 lines long, 1 inch 5½ lines wide; under surface nearly flat. Grinders $\frac{4}{5}$, the upper hinder oblong, narrow behind; the lower smaller, oblong. The lower false grinders moderate, elongate; the upper wanting in both skulls. Lower canines very close. A second skull, length 1 inch 10 lines, width 1 inch 1½ line; the hinder grinder oblong, lower rather the smallest; the first upper grinder near the canine; the lower false grinder crowded in between the base of the first grinder and the canine; the canine and the first and second grinders with a denticle on the lower edge, more distinct in the teeth of the lower jaw.

SECTION B. *Teeth* 28. *True grinders* $\frac{2}{2}$. $\frac{2}{2}$. *The false grinders* $\frac{3}{3}$. $\frac{3}{3}$, *front small, often deciduous. Wings from the sides of the body. Penis-gland fleshy. It is the small hinder upper and lower true grinders of the former section that are deficient.*

Tribe IV. HARPYIANA.

Cutting-teeth $\frac{2}{2}$ or $\frac{2}{0}$; lower, when present, crowded before the canines. Head short. Nostrils tubular, expanding.

9. HARPYIA.

Head short, broad, tapering. Nostrils elongate, tubular, diverging. The back, shoulders, thighs, edge of the wings, near the side, and the interfemoral membrane hairy. Fur very soft. Tail short, free at the end, on underside of the interfemoral membrane. Lower joint of the thumb elongate, and the base of the upper one enclosed in the broad membrane. Wings arising from the sides of the body, and affixed nearly to the middle of the outer toe. Index finger clawed. Cutting-teeth $\frac{2}{2}$, upper small, close.

"Intermaxillaries rudimentary, cartilaginous."—*Temm. Mon.* ii. p. 90.

Harpyia, *Illiger; Temm. Mon.* ii. 98. Cephalotes, *Geoff.* Gelasinus, *Lesson.* Uronycteris, *Gray, Ann. & Mag. N. H.* 1863, xi. p. 386.

1. Harpyia cephalotes. B. M.

Grey, back with a black vertebral streak, beneath rather paler; arm-bone 2 inches 6 lines.

Harpyia Pallasii, *Desm.*; *Temm. Mon.* ii. p. 98, t. 39. Cephalotes Pallasii, *Geoff. Ann. Mus.* xv. Vesp. cephalotes, *Pallas, Spic. Zool.* iii. t. 1, 2. Céphalote, *Buffon, Supp.* iii. t. 22.

The skull oblong, short and broad, nose very short; upper and lower false grinders distinct, minute; grinders close together. Length 1 inch 3 lines, width 9 lines; the upper cutting-teeth large, occupying the whole space between the canines; the lower canines quite close together in front, without any cutting-teeth in front.

Hab. Georgia Island, *Cuming.*

2. Harpyia albiventer.

Fur grey; bases of the hairs grey, with blackish tips; underside paler, grey brown; arm-bone 2 inches.

Uronycteris albiventer, *Gray, P. Z. S.* 1862, p. 262; *Ann. & Mag. N. H.* 1863, xi. p. 386.

Hab. Morty Island, *Wallace.*

Chiefly differs from *H. cephalotes* in the absence of the dorsal streak and smaller size; may be only the young of former.

Tribe V. CYNOPTERINA.

Cutting-teeth $\frac{4}{4}$, lower in a regular series. False grinders $\frac{2}{3}.\frac{2}{3}$. Head broad, short. Nostrils rather prominent. Grinders close together.

10. CYNOPTERUS.

Head short, broad behind; nose short, conical; lips thick at the sides; wings from sides of the back, attached to the bases of the toes; index finger clawed; the back, shoulders, part of the upperarm above, edge of the wing near the back and the thighs, and part of the interfemoral membrane covered with hair; the large blood-vessel from the armpit and the groin divided and redivided before reaching the edge of the wing; tail short, free at the end; interfemoral membrane distinct, with a band on each side from base of tail to heel; thumb elongate, lower joint short, it and the base of the much longer upper joint enclosed in the membrane.

Cynopterus, part., *F. Cuv.* Pachysoma, part., *Is. Geoff.* not *Fabricius.* Pachysoma, sp., *Tomes.*

Found in clusters on the folded leaves of the plantain, the palmyra, &c., *Elliot.*

* *Asia. Hair of neck-collar slender, weak.*

1. Cynopterus marginatus. B. M.

Brown, often rufous-washed, greyer beneath. *Male.* Side of throat with more or less intense-red radiating hairs.

Pteropus marginatus, *F. Cuvier*; *Geoff. Ann. du Mus.* xv. p. 97, t. 8.

Hab. India and the Islands.

Var. *Elliotii.* Fur brown; white margin of ear well marked; arm-bone 2 inches 9 lines; skull, length 1 inch 3 lines, breadth 9 lines; upper cutting-teeth close together, the outer converging. B. M.

Cynopterus marginatus (*c* and *d*), *Gerrard, Cat. Bones B. M.* p. 58.

Hab. India: Madras, *Sir John Boileau* (in spirit); Madras, *Elliot*, stuffed (male and female).

Var. *ceylonensis.* Fur blackish brown, underside rather greyer; white margin of ear narrow, indistinct; arm-bone 2 inches 4 lines.

Hab. Ceylon, *Thwaites* (male and female in spirits). B. M.

Var. *titthæcheilus.* Fur dull brown, underside rather greyer; hair of side of throat and chest very short, with a slight rufous tinge; forearm-bone 2 inches and 7 lines. B. M.

"Pachysoma titthæcheilus, *Is. Geoff.*," *Temm. Mon.* i. pp. 198, 261, t. 15. f. 17, 24; ii. p. 192, t. 35. f. 8! (from Mus. Leyden). Cynopterus titthæcheilus, *Temm., Horsf. MS.*

Hab. Malacca, *Griffith.*

Var. *brevicaudatum.* Fur reddish brown; crown of head and nape rather darker, duller; sides of the neck bright red; abdomen pale brown; forearm-bone 2 inches 7 lines. B. M.

Pachysoma brevicaudatum, *Is. Geoff.*; *Temm. Mon.* ii. p. 92, t. 36. f. 20, 21! *Tomes, P. Z. S.* 1858, p. 537; 1860, p. 56! Cynopterus brevicaudatus, *Gray, List Mamm. B. M.* p. 39. Pteropus brevicaudatus, *Fischer, Syn.* Cynopterus marginatus (*b*), *Gerrard, Cat. Bones B. M.* p. 58!

Hab. Sumatra, from Mus. Leyden; Java? skeleton, from Mus. Leyden. Skull 1 inch 1 line long; forearm-bone 2 inches 3 lines; upper cutting-teeth slender, rather far apart, long; upper front false grinders very small.

See also

a. *Pachysoma Diardii*, Is. Geoff. Dict. Class. H. Nat. xiv. p. 705; Temm. Mon. ii. p. 95, Sumatra.

b. *P. Duvaucellii*, Is. Geoff. Dict. Class. H. Nat. xiv. p. 705; Temm. Mon. ii. p. 95, Sumatra. Sides of the neck not so much and intensely red as in *P. Horsfieldii*. A skeleton in the British Museum sent from the Leyden Museum as *Cynopterus marginatus*, Temm., has the skull 1 inch 5 lines, the forearm-bone 3 inches 1 line long, and the upper cutting-teeth close, the outer rather converging.—*Gerr. Cat. Bones B. M.* p. 58.

Var. *Horsfieldii*. Fur dark brown, paler on the sides of the throat and back; head darker; abdomen grey white. *Male*. Neck and sides of body very bright rufous. *Female*. Neck reddish; sides grey; forearm-bone 2½ inches? B. M.

Pteropus marginatus, *Horsf. Zool. Java*, t. ! Cynopterus Horsfieldii *Gray, List. Mamm. B. M.* p. 38 !

Hab. Java, *Horsfield*.

See *Pteropus melanocephalus*, Temm. Mon. i. p. 190, t. 12, t. 16. f. 3, 4; ii. t. 35. f. 10, t. 36. f. 22, 23. *Pachysoma melanocephalus*, Is. Geoff. *Hab.* Java. Ashy brown; beneath dull white; crown and nose black.

Var. *brachyotis*. Fur dull brown; throat and sides of neck red; arm-bone 2 inches 4 lines. B. M.

Pachysoma brachyotis, *Müller, Van der Hoeven, Tijdschr.* v. p. 146; *Temm. Mon.* ii. p. 362 !

Hab. Borneo: in spirit, from Mus. Leyden. I see no difference in the length of the ears between this and the other species.

Var. *philippensis*. Fur pale reddish brown, paler beneath. B.M.

Pachysoma titthæcheilus, *Waterhouse, Mus. Zool. Soc.* !

Hab. Philippines, *Cuming* (male and female, in spirit).

Var. *Cumingii*. Fur blackish brown, rather greyer beneath; the margin of the ears narrow; arm-bone 2 inches 6 lines; interfemoral membrane hairy; tail slender, free. B. M.

Pachysoma brevicaudatum, *Waterhouse, Mus. Zool. Soc.* !

Hab. Philippines, *Cuming* (male and female, in spirit).

Var. *nigrescens*. Fur brown; head rather dark; nose, orbit, and cheek blackish; throat, sides of the neck, and beneath grey brown.

Hab. Morty Island, *Wallace*.

** *Africa. Hair of neck-collar thick, harsh.*

2. Cynopterus collaris. B. M.

Fur reddish brown, beneath rather duller; throat with a broad collar of rigid unctuous red hairs; hairy part of back rather narrow; shoulders and lower half of forearm hairy; forearm-bone 2¼ inches. Young.

Xantharpyia collaris, *Gray, List. Mamm. B. M.* 1843.]

Hab. West Africa, *Currer* (from Haslar Museum); Angola, *Wellwich* (in spirits).

See also *Ptenochirus*, a subgenus of *Cynopterus*, Peters.

11. MEGÆRA.

Tail none. Lower joint of the thumb very short. Back, shoulders, forearms, thigh, base of interfemoral membrane, and wings near the

See *Epomophorus comptus*, Allen, Proc. Acad. N. S. Philad. 1861, p. 158. Fur soft reddish fawn, becoming darker on the loins and base of arms; under surface with a large ovoid patch of dirty white, bounded laterally by longitudinal fawn-coloured stripes; face covered with short brown hairs; small yellow tuft at the base of the ears; chin whitish; epaulettes faintly marked; lips moderate. *Hab.* West Africa: Gaboon, *Du Chaillu*. Intermediate in size between *E. gambianus* and *schoensis*. Arm-bone 3 inches; Skull smaller than that of *E. gambianus*, with only two incisors in the upper jaw, which are in the centre of the intercanine space, and slightly separated from each other.

2. Epomophorus gambianus. B. M.

Brown, middle of the underside whitish.

Pteropus gambianus, *Ogilby*, *P. Z. S.* 1835, p. 100. Epomophorus gambianus, *Gray*, *Mag. Zool. & Bot.* ii. p. 504; *Tomes*, *P. Z. S.* 1860, p. 52; 1861, t. 1. f. 2 (skull). Pachysoma gambianus, *Temm. Esq.* p. 69, 1853. Pteropus Wahlbergii, *Sundevall*, *K. Vet. Akad. Stock.* 1846, p. 118.

Hab. Gambia, *Rendall*; Port Natal and Caffraria, *Sundevall*; ? Angola, *Monteiro* (in spirit); Abyssinia, *Verreaux*.

See also

a. *Pteropus Wahlenbergii*, Sundevall, V. Akad. Stock, 1846, p. 118; *Epomophorus crypturus*, Peters, Mossamb. Mamm. p. 26, t. 5 & 13. f. 1 (skull); Tomes, P. Z. S. 1861, p. 12. *Hab.* Mossambique, *Peters*; *Sundevall*; *Tomes*.

b. *Pteropus labiatus*, Temm. Mon. ii. p. 83, t. 9; *Pachysoma labiatum*, Temm. Esq. p. 68, 1853; *Epomophorus labiatus*, Tomes, P. Z. S. 1860, p. 55; 1861, p. 13. *Hab.* Abyssinia, Mus. Leyden. Allied to *P. macrocephalus*.

14. EPOMOPS.

Like *Epomophorus*, but head ovate. Skull ovate, broad. Face moderate, not nearly so long as the brain-case. Zygomatic arches convex. Cutting-teeth separate, far apart in the intercanine space. Grinders $\frac{4}{5}$, close together.

Epomophorus, sp., *Tomes*.

Epomops Franqueti.

Brown, the middle of the belly white; the epaulettes very large, white (in spirit); ear-spot white.

Epomophorus Franqueti, *Tomes*, *P. Z. S.* 1860, p. 54, t. 75; 1861, t. 1. f. 3, skull.

Hab. West Africa: Gaboon, *Franquet*.

See also

a. *Pteropus Haldemani*, Halowell, Ann. & Mag. N. H. 1846, xviii. p. 356. Dark brown, chest and sides brown, belly white; arm-bone 3 inches. *Hab.* West Africa.

b. *Pteropus schoensis*, Rüppell, Mus. Senck. 1842, p. 131; *Epomophorus schoensis*, Tomes, P. Z. S. 1860, p. 56; 1861, p. 12, t. 1. f. 4 (skull). *Hab.* Abyssinia, *Rüppell*; Gaboon, *Franquet*; Gambia, *Rendall*. A small species. Length of arm-bone 2 inches.

APPENDIX.

Page 7. **Mimetes troglodytes.** Add:—

d. *Troglodytes Aubryi*, Gratiolet, Nouv. Arch. Mus. d'Hist. Nat. 1866, ii. pp. 1, 564.

Entirely black face, and a decided well-developed lobe on the hinder part of the last lower molar. I do not see how this species differs from the common Chimpanzee.

Troglodytes tschego, *Du Chaillu*. Anthropopithecus tschego, *Slack*, *Proc. Acad. N. Sci. Philad.* 1867, p. 34.

Prof. Bischoff, Sitzgsber. bayer. Ak. 1867, i. pp. 283–293, says that this is not distinct from *T. niger*.

Page 7. **Gorilla Savagei.**

Anatomy: *Owen*, *Trans. Zool. Soc.* v. p. 243, tab. 1–7; *Turner*, *Proc. Royal Soc. Edinb.* 1865, p. 341; *Meyer*, *Fünft. Bericht d. Offenbach. Verein.* 1864, pp. 58–62, pl.

Page 17. **COLOBUS.**

Synopsis of species of this genus, Gray, Proc. Zool. Soc. 1868, p. 180.

Page 18. Add:—4*a*. **Colobus Kirkii.** B.M.

Head with long divergent hairs, forming a kind of cap, bent back over the forehead. The crown of the head, back, and tail red-brown, end of tail rather paler; the nape, upper surface of hands and feet, and outside of the upper- and forearm and of the thighs blackish; the forehead, cheeks, throat, side of the neck, chest, underside of the body, inner side of the limbs, and the hind legs and the hinder edge of the

arms and thighs greyish white; a few bristly hairs on the eyebrows black.

Colobus Kirkii, *Gray, P. Z. S.* 1868, p. 180!

Hab. Zanzibar.

See *Colobus palliatus*, Peters, Monatsber. Ak. Wiss. Berlin, 1868, p. 637; Gray, Ann. & Mag. Nat. Hist. 1869, iii. p. 171. *Hab.* Eastern Africa; Mus. Berlin.

Page 19. **Colobus cristatus.** Add:— B.M.

Gray, P. Z. S. 1868, p. 182, t. 15, hinder figure.

Colobus verus is, I believe, the same as *cristatus*; but the crest was not observed by the describer.

Page 20. **CERCOPITHECUS.**

Synoptical list of species, Gray, P. Z. S. 1868, p. 182.

Page 23. Add:—11**. **Cercopithecus erythrogaster.** B.M.

Fur blackish, minutely punctulated with yellow; crown yellowish; hand and wrist blackish; outside of hind legs and thighs grey, punctulated with blackish; face, moustache, frontal and temporal band black; spot on cheek pale yellow; whiskers, beard, throat, and side of neck white; front of thighs and under surface of the tail greyish white; chest and belly red-brown.

Cercopithecus erythrogaster, *Gray, P. Z. S.* 1866, p. 169, t. xvi.; *Murie, P. Z. S.* 1866, p. 380.

Hab. West Africa.

Page 24. 15. **Cercopithecus samango.** Add B.M.

Page 27. **Cercocebus albigena.** Add B.M.

Page 30. Add:—5*a*. **Macacus problematicus.** B.M.

Forehead and crown with erect hair, rather directed forward in front, with a whorl of radiating hair on the back of the forehead. Fur thick, abundant, rather long, pale reddish brown; of the chin, throat, underside of the body, inner side of the limbs, greyish white. Tail slender, covered with close-set hair, not so long as the body (imperfect?).

Assam Monkey, *Bartlett, Land & Water*, 1869!

Hab. Assam, *Bartlett.*

Page 31. Add:—9*a*. **Macacus cyclopis!** B.M.

Hab. Formosa.

Peculiar for the length of the fur, which is expanded on the base

of the tail and sides of the rump. Tail not so long as the body, thick, broad at the base, thin in the middle, and rather clubbed at the end. (See Catal. p. 31.)

9*b*. **Macacus Sancti-Johannis.** B.M.

Fur dark olive, minutely punctulated with yellow; head, shoulders, and fore legs darker and blackish; stronger hairs over eyebrows black. Tail imperfect, probably shorter than the body.

Inuus Sancti-Johannis, *Swinhoe, P. Z. S.* 1866, p. 556!

Hab. Hong-Kong; island of North Lena.

Very like the preceding; perhaps only a younger specimen with the tail in a bad state.

Page 32. Add:—12. **Macacus inornatus.** B.M.

Hair of the crown reflexed, dark greyish brown, brighter-washed; forehead and cheeks blacker; hind part of the thighs greyish white; face and ears naked, black; buttocks red; tail very short, rudimentary.

Macacus inornatus, *Gray, P. Z. S.* 1866, p. 202, t. xix.!

Hab. Borneo.

The two specimens in the British Museum are evidently faded, and probably prepared from specimens originally preserved in spirits.

The face of *M. arctoides* is red. I had proposed for this species the subgeneric name *Gymnopyga*, on account of the shortness of the tail and the great extent and nakedness of the rump.

13. **Macacus lasiotus.** B.M.

Tail none; ears ovate, prominent, exposed, covered with hair; fur yellowish olive, very minutely punctulated by the small subterminal yellow rings; of the rump and outer side of the thighs reddish; of the face, cheeks, chest, front of the shoulders, and under part of the body grey; the skin of the hinder part of the body, near the callosities, crimson; the crown covered with short erect or reflexed hairs, with a few blackish hairs projecting forwards over the eyebrows; the chest and under part of the body covered with abundance of hairs; skin of face whitish flesh-coloured, with a small red naked spot at the outer hinder angle of each eye; hand covered with hair, blackish.

Macacus lasiotus, *Gray, P. Z. S.* 1868, p. 61, pl. 6!

Hab. China.

Page 32. See

Macacus fur, Slack, Proc. Nat. Sci. Philad. 1867, p. 36, tab. 1. From Luçon.

Page 35. See

c. *Cynocephalus doguera*, Slack, Proc. Soc. Nat. Sci. Philad. 1867, p. 35. From Abyssinia.

Page 41. **ATELES.**

Description of new species, Gray, Proc. Zool. Soc. 1865, p. 732.

Page 45. Add :—13. **Ateles Bartlettii.** B.M.

Fur abundant, long, and soft. Black; the cheeks white; a band across the forehead over the orbit bright reddish yellow; the chest, belly, inner side and front and back part of the limbs, and the side and under surface of the tail yellow.

Ateles Bartlettii, *Gray, P. Z. S.* 1867, p. 992, t. 47 !

Hab. Eastern Peru, near Xeberos.

Female or *var.* "The parts which are bright yellow in the male which I described are, in this female, white or greyish white, the confines of the two colours are not so distinctly marked, and the spots on the forehead and cheeks are much smaller and much less distinct."—*Gray, Ann. & Mag. Nat. Hist.* 1870, vi. p. 428.

Hab. Caura River, on the Orinoco. B.M.

Page 46. **CEBUS.**

Synopsis of species, Gray, Proc. Zool. Soc. 1865, p. 824.

Page 62. **HAPALE** and **MIDAS.**

Synopsis of species, Gray, Proc. Zool. Soc. 1865, p. 734.

Page 64. Add :—14 *a*. **MICOELLA.**

Ears large, nakedish. Conch of ear large, covered externally and internally with elongated hairs, which form a fringe on the circumference, but not a pencil. Tail pale, not annulated. Lower cutting-teeth elongate, cylindrical; the two outer as long as the canines; the two middle rather shorter, equal.

This genus differs from *Mico* in the ears being large, roundish, flesh-coloured, covered inside and out with distinct rigid expanding hairs which form a double fringe on the circumference. (See Proc. Zool. Soc. 1868, p. 256, tab. 24.)

1. **Micoella sericeus.** B.M.

Fur white, soft, silky; legs, feet, and tail pale yellowish; ears large, roundish, flesh-coloured.

Mico sericeus, *Gray, P. Z. S.* 1868, p. 256, t. 24. Hapale argentata, *Sclater, P. Z. S.* 1868, p. 262. Hapale chrysoleucos, *Sclater, P. Z. S.* 1869, p. 594?

Hab. Brazil, *Natterer.*

The specimen described and figured is in the British Museum; the outsides of the legs were never so dark as in Mr. Wolf's figure, but now they are nearly as white as all the rest of the body. The belly was always white.

2. **Micoella chrysoleucos.** B.M.

Fur yellowish white; the fore and hind legs, the belly and tail pale chestnut brown in male.

Hapale chrysoleucos, *Wagner, Wiegmann's Archiv*, 1842, i. p. 357; *Säugethiere, Suppl.* p. 125; *Sclater, P. Z. S.* 1869, p. 594 (part.).

Hab. Brazil, *Natterer.*

Page 68. Fam. LEMURIDÆ,

belonging to Subsection A of Section A.

The arrangement of the smaller Lemuridæ is very unsatisfactory. We have received within the last few months several specimens; and they may be thus arranged according to their skulls:—

I. *Upper cutting-teeth* 2.2, *close to the canine, and one placed behind the other. Brain-case ovate. Nose rather elongate.* Hapalemurina.

HAPALEMUR. Nose and palate conical.

PROLEMUR. Nose and palate broad and truncated in front.

II. *Upper cutting-teeth* 2.2, *in a curved line; two middle more or less larger than the others, erect, or converging towards the central line.*

* *Brain-case ovate; nose rather produced; tail thick, clavate.*

† *Ears short, covered with fur externally.* Lemurina.

VARECIA, LEMUR, and PROSIMIA.

CHEIROGALEUS. Inner upper cutting-teeth moderate. Tail with woolly hair. *Cheirogaleus typicus*, Cat. p. 78.

†† *Ears moderate, membranaceous, and naked at the end.* Microcebina.

MIRZA. Upper cutting-teeth moderate, converging. Tail with straight rigid hairs. *Mirza Coquerelii*, p. 136.

PHANER. Inner upper cutting-teeth very large, projecting inwards and forwards. Tail with diverging soft hair. *Phaner furcifer*, Cat. p. 135.

** *Brain-case subglobular; nose short, conical; orbits very large; tail slender, covered with short woolly hair.* Murilemurina.

† *Ears very large, naked, plicate.* Galagonina, p. 79.

OTOGALE, GALAGO.

MURILEMUR. Inner upper cutting-teeth twice as large and long as the outer. *M. murinus*, Cat. pp. 87, 135.

AZEMA. Upper cutting-teeth nearly equal, erect. *Azema Smithii*, p. 134. *Cheirogaleus Smithii*, Cat. p. 78.

III. *Upper cutting-teeth none. Brain-case oval. Nose short and broad. Tail cylindrical, covered with woolly hair.* Lepilemurina.

LEPILEMUR.

Page 70. LEMURINA.

See Mivart, Osteology, Proc. Zool. Soc. 1864, pp. 611–648; 1867, p. 960.

Add before this tribe:—

A. *Teeth* 36: *lower cutting-teeth* 6; *grinders* $\frac{6.6}{6.6}$.

Page 70. **Varecia varia.**

Varecia leucomystax, p. 72, is the ♀ of this species.

See Schlegel, Ned. Tydschr. Dierk. iii. 1865, pp. 74–78; Sclater, Proc. Zool. Soc. 1866, p. 1; Pollen, Fauna Madagasc. p. 1, tab. 1 (♂ & ♀).

Page 73. **PROSIMIA.**

See monograph of this genus, Schlegel, Ned. Tydschr. Dierk. iii. pp. 74–76. Abridged, Günther's Zool. Record, 1865, p. 23.

Page 76. Add:—11. **Prosimia flavifrons.**

Fur soft, silky, bright pale red-brown; hinder part of the back rather darker. Nose and feet dark red-brown. Circumference of the face, sides of the chin, the throat, and chest pale reddish yellow. Iris of the eyes grey. Male.

Prosimia flavifrons, *Gray*, *P. Z. S.* 1867, p. 596, pl. 31.

Hab. Madagascar.

Page 76. Add:—

a. *Lemur mayotensis*, Schlegel & Pollen, Fauna Madagasc. p. 3, tab. 2. *Hab.* Madagascar.

Page 76. HAPALEMUR.

This genus can be divided into two sections:—

I. *Nose tapering, narrow in front; skull, nose tapering, narrow in front; palate dilated behind; series of grinders converging in front. Lower jaw broad and strong in front, with a long symphysis.* HAPALEMUR.

Hapalemur griseus.

Hapalemur griseus, *Sclater, P. Z. S.* 1863, p. 161; *Mivart, P. Z. S.* 1864, p. 613, fig. skull (copied, *Cat. Monkeys &c. B.M.* p. 77).

II. *Nose broad and truncated; skull, nose very broad, square, truncated in front; palate scarcely wider behind; series of grinders wide apart and nearly parallel. Lower jaw weak, and narrow in front, with a short symphysis.* PROLEMUR.

Hapalemur simus. B.M.

Back iron-grey, with a rufous tinge; the hairs black, with a subapical rufous band, and the lower part lead-coloured; throat whitish; patch on rump at base of tail yellowish.

Hapalemur griseus, *Schlegel & Pollen, Fauna Madagasc.* p. 6, t. 3 & t. 7. fig. 4 (skull without upper cutting-teeth).

Hab. Madagascar.

This may be *Hapalemur olivacea*; but that species is very imperfectly described, and it is said to have a different form of the hinder part of the lower jaw; but what the difference is is not mentioned, and I do not see any difference in the hinder part of the lower jaws of the two species. The front of the jaw in *H. griseus* is very much more slender and weak than in *H. simus*.

The colour of the fur is exactly similar to that of *H. griseus*; only there is a pale spot on the rump at the base of the tail, which may be accidental, or caused by the manner in which it was confined in its cage.

Page 78. 2. Cheirogaleus typicus.

Skull:—Brain-case ovate, elongate, rather depressed; nose rather elongate, conical; orbits large; palate rather broad in front, much broader behind; upper cutting-teeth 2 . 2, in an arched series, compressed, erect; inner thicker, and quite as long as the outer ones, converging towards the central line. Tail of animal cylindrical, covered with soft woolly hair.

Skull in shape like *Lepilemur Coquerelii* and *L. furcifer*; but the latter differs in the very large size and the projecting central upper cutting-teeth.

Page 78. 3. **Cheirogaleus Smithii.** Change to

Azema Smithii, p. 132.

Skull:—brain-case globular; nose conical; orbits very large; palate very contracted in front, much wider behind; upper cutting-teeth 2 . 2, in an arched series, nearly equal in height and size, erect.

Skull in shape very like *Lepilemur murinus*, but differs in the inner upper cutting-teeth being scarcely larger and very slightly bent, tending toward the central line; and the tails of both animals are slender and covered with short hairs.

Page 78. Add:—

a. *Cheirogaleus samati*, Grandidier, Rev. et Mag. Zool. 1868, p. 50; and Ann. Sc. Nat. 1867, vol. viii. p. 294. *Hab.* West coast of Madagascar.

Page 82. Add:—See

a. *Galago elegantulus*, Slack, Proc. Ac. Nat. Sc. Philad. 1867, p. 37, which he considers to be distinct from *Otogale crassicaudatus*.

Page 86. **LEPILEMUR.**

Erase the character of this genus as not being the genus so named by I. Geoffroy. The species are referred to other genera as follows:—

8. **LEPILEMUR.**

Head round; nose rather short, broad; ears moderate, hair at the base external. Fur soft, woolly, with an obscure dorsal streak forked on the forehead, uniform. Nose broad. Tail slender, with short hairs (like those on the back) at the base; rather thicker and with long hairs at the end. Thigh elongate. Hind feet short. Skull:—Nose broad, truncated in front. Palate broad, broad in front, scarcely wider behind. Intermaxillary bone very narrow, with a sharp front edge. Upper cutting-teeth none; lower 6, projecting. The front upper false grinder slightly higher than the second, with a slight lobe at the base of its front edge.

Lepilemur, *I. Geoffroy*, not *Gray*, *Cat.* p. 86.

The absence of cutting-teeth is the peculiar characteristic of this genus, and not an unusual peculiarity as I thought it might be (Cat. p. 88). There are several specimens in the British Museum confirming this peculiarity.

1. Lepilemur mustelinus. B.M.

Dark grey, yellow-washed, with a black dorsal streak forked on the nape; throat and beneath whitish grey.

Lepilemur mustelinus, *I. Geoffr.*; *Gray, Cat.* p. 88, c.; *Pollen, Fauna Madagasc.* p. 10, t. 4 & t. 7. fig. 3 (skull).

Hab. Madagascar.

2. Lepilemur dorsalis. B.M.

Back grey, yellow-washed; dorsal stripe none.

Hab. Madagascar.

Two specimens in the British Museum. The skulls of the two species are very similar. There are both sexes of the species in the British Museum.

8 *a*. MURILEMUR.

Back uniform. Skull:—Face rather elongate, conical. Palate contracted in front, dilated behind. Tooth-line diverging. First false grinder conical, the same size as the second; upper canine teeth very compressed and sharp-edged behind; inner upper cutting-teeth very large, conical, acute, erect; the outer ones very small, cylindrical, much shorter than the inner, slender, erect.

The peculiar lanceolate form of the middle upper incisor teeth is not represented in Mr. Mivart's figure of the skull of this animal.

Murilemur murinus. B.M.

Lepilemur murinus, *Cat.* p. 87, f. 13.

8 *b*. PHANER.

Head roundish; nose rather conical; ears rather large, ovate, hairy at the outer base. Fur soft, woolly, with a black streak forked on the occiput. Tail thick, covered with long soft hair like the back at the lower half, and with longer, slightly more rigid hair at the end. Hind legs moderate. Skull:—Nose rather contracted, conical. Palate narrow in front, rather wider behind. Inner upper cutting-teeth very large, decumbent, and bent forward; the outer upper cutting-teeth erect, cylindrical, smaller. The first upper false grinder very large, compressed; the front one in the lower jaw very small and generally worn away by the friction of the upper one on it.

Phaner furcifer. B.M.

Lepilemur furcifer, *Cat.* p. 88. Cheirogaleus furcifer, *Schlegel & Pollen, Fauna Madagascar.* p. 8, t. 5 & t. 7. fig.1 (skull).

8 *c*. MIRZA.

Face rounded; nose broad, rather tapering; ears moderate, bald, ovate. Fur woolly, uniform. Tail elongate, covered for more

than two thirds of its length with rather rigid straight hairs, thicker and more diverging towards the end. Nose rather broad. Palate broad, rather narrower and rounded in front. Upper cutting-teeth: two middle compressed, moderate-sized, nearly erect, converging towards the central line; outer less than half the size of the inner, about two-thirds the length. The front upper false grinder not so long as the second, with a very slight lobe on the hinder and front edges of its base.

Mirza Coquerelii. B.M.

Fur soft and woolly, grey-brown, with very short bright golden tips; back dark; throat and beneath grey-brown; tail cylindrical; hair bright golden brown, with black tips, which are longer on the hairs at the tip of the tail.

Microcebus Coquerelii, *Schlegel & Pollen, Fauna Madagascar.* p. 12, t. 6 & t. 7. fig. 2 (skull). Cheirogaleus Coquerelii, *Grandidier, Rev. Zool.* 1867, p. 85.

Hab. Madagascar.

See

a. *Lepilemur ruficaudatus*, Grandidier, Rev. et Mag. Zool. 1867, p. 256.

Page 89. Tribe III. MICRORHYNCHINA.

Add before this tribe:—

B. *Teeth* 34: *lower cutting-teeth* 4; *grinders* $\frac{5.5}{5.5}$. *Feet short and broad.*

Page 89. **MICRORHYNCHUS.** Add:—

Nose very short, broad, truncated. Palate broad, rounded in front, and scarcely wider behind. Upper cutting-teeth 4, in an arched series, erect; the inner upper cutting-teeth very small, cylindrical; the outer ones much larger and longer, nearly truncated. Canines, upper thick. The first upper false grinder thick, with a rounded upper edge, scarcely higher than the second.

Microrhynchus laniger. Add:— B.M.

Blainville, Ostéog. t. 8; *Mivart, P. Z. S.* 1866, p. 151.

Skull in British Museum.

Page 90. Add:—2. **Propithecus Verreauxii.** B.M.

White; crown and nape brownish black; face naked, black; chest, belly, and inner side of limbs, hands, and feet black, nakedish, covered with white hairs.

Propithecus Verreauxii, *Grandidier, Rev. et Mag. Zool.* 1867, pp. 84 & 313.

Hab. Madagascar.

3. Propithecus Damonis. B.M.

Fur white: face blackish; nose covered with a patch of short white hairs; chest, front and outside of fore limbs, and the front and outside of the thighs rusty red.

Propithecus Damonis, *Pollen.* Propithecus Coquereli, *Milne-Edwards.*

Hab. Madagascar.

These are so much alike that I should not be astonished if all the three named species were mere varieties of colour of the same animal. We have skulls of *Propithecus diadema* and *P. Damonis* in the British Museum; and they are very much alike.

Page 92. Add:—**3. Nycticebus cinereus.** B.M.

Nycticebus cinereus, *Milne-Edwards, Ann. Sc. Nat.* 1867, vii. p. 161, *and Nouv. Arch. Mus. Bull.* iii. p. 9, pl. 3.

From Siam and Cochin China; in Brit. Mus. from Mus. Paris.

Page 97. **Daubentonia madagascariensis.** B.M.

ANATOMY: *Peters, Abhand. Ak. Wiss. Berlin,* 1866, pp. 79–100, pl.; *Sitzsber. Ges. ntrf. Freunde Berlin,* 1866, June 19.

Lives on sugar-cane.—*Bartlett, Ann. & Mag. Nat. Hist.* 1865, xvi. p. 142.